Health Care Financing Grants and Contracts Report

National Hospital Rate-Setting Study, Vol. III

Case Study of Prospective Reimbursement in Maryland

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Case Study of Prospective Reimbursement in Maryland

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MARYLAND

Authorized by legislation passed in 1971, The Health Services Cost Review Commission (HSCRC) in Maryland is located in The Department of Health and Mental Hygiene (DHMH) but functions as an independent agency. Its budget is part of the overall budget for DHMH, but its decisions are not subject to review and approval by DHMH. The Commission consists of seven part-time commissioners and a permanent staff. HSCRC hires most of its staff independently of Civil Service and has had a very low staff turnover since its inception.

The Commission did not begin setting rates for hospitals until 1974. At that time rates paid by charge-based payers were frozen, and an automatic inflation adjustment was applied every six months thereafter until the Commission could complete a detailed review of each hospital's budget. Three years elapsed before all hospitals had passed through detailed review at least once. The process of granting automatic inflation adjustments has been refined over time and is now used by most hospitals each year to avoid the expense and detailed scrutiny of a public hearing before the Commission. In 1976 HSCRC implemented a system, now covering about one-third of the state's hospitals, which applies an automatic adjustment for inflation to base-year charges per case on a diagnosis-by-diagnosis basis. This system rewards hospitals for decreasing intensity of service and length of stay within each diagnostic category and penalizes increases in intensity and length of stay.

Although automatic adjustments for inflation are now used more extensively than detailed budget reviews, hospitals may request a detailed review at any time they are dissatisfied with the results of the system of automatic adjustments. The analytic procedures used in detailed reviews rely heavily on comparisons of departmental costs across similar hospitals. Specific items are negotiated with hospitals; disputes not resolved between hospitals and the Commission's staff are submitted to the commissioners for public hearing. Whether an automatic inflation adjustment or a detailed budget review is applied, HSCRS's findings establish approved rates per unit of service. Before 1977 these rates applied to Blue Cross and all charge-based payors. Since 1977, approved rates have been paid also by Medicare and Medicaid.

Hospitals must file quarterly compliance reports with the Commission. When the hospital's detailed schedule of charges has generated reimbursement in excess of approved rates, the excess is deducted by lowering approved rates for a subsequent year. If the volume of services increases (decreases) for a given year, the hospital will receive a retrospective adjustment equal to the variable cost (fixed cost) portion of unit cost for inpatient services and, to encourage outpatient care, equal to 100 percent of unit cost of outpatient services.

ACKNOWLEDGMENTS

The authors would like to acknowledge that information for this case study was provided through personal and telephone interviews, correspondence and secondary data supplied by many people. A list of these people is included in Appendix A of this report.

The authors would like to especially acknowledge Graham Atkinson, Jack Cook and Jim Kelly, staff of the Health Services Cost Review Commission, for the generous amount of time and effort they contributed to our knowledge.

In addition, the authors would like to thank Mary Schumacher, and earlier Kim Lanzillotti, for their editing assistance in this final product. Extensive thanks go to Sharon Snyder for coordination of the site visits, copy editing, management of production and most importantly, formatting of text and tables. Last, but certainly not least, thanks go to Valerie Simpkins, who assisted in the typing and production of this report.

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FOREWORD

The following case study report of prospective reimbursement in Maryland has been written as part of the National Hospital Rate-Setting Study. This study is being conducted for the Office of Research, Demonstrations, and Statistics of the Health Care Financing Administration, U.S. Department of Health, Education, and Welfare, by Abt Associates Inc., Policy Analysis, Inc., and Health Economics Research, Inc.* The overall goal of the three-year study is to determine the impact of rate setting on hospital costs, quality of hospital care, and access to health care by the elderly and the economically disadvantaged. In addition, the study will examine the impact of prospective reimbursement on other areas of hospital performance, including revenues, volume and composition of services, productivity, wages, case mix, and administrative behavior. Because the effects of prospective reimbursement may be felt beyond the hospital sector, the study will also examine impacts on the costs and utilization of the health care system as a whole.

This volume is one of nine case study reports (Arizona, Connecticut, Maryland, Massachusetts, Minnesota, New Jersey, New York, Washington, and Western Pennsylvania). Each report examines in detail the adoption, implementation, review processes and legal challenges of each prospective reimbursement system. In addition, the reports examine linkages and interactions that take place between rate-setting agencies and other organizations such as planning groups, hospital associations, third party payors, and unions. Each case study also presents a preliminary analysis of the potential rigor and equity of the prospective reimbursement system. (A separate report, A Comparative Analysis of Nine Prospective Reimbursement Programs, analyzes all nine programs simultaneously along these factors.) The case study reports will be most useful to those interested in a detailed description of the prospective reimbursement programs in the nine states under study.

The preliminary analyses of rigor and equity in the case studies are interim in nature. Data collection on hospital performance is still ongoing and will yield important information about the effectiveness of administrative structures and procedures in containing costs and delivering quality service. Final results of the study are expected in 1982.

Diane E. Hamilton
Deputy Project Director &
Director of Case Studies
National Hospital
Rate-Setting Study

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*Arthur D. Little, Inc. and Arthur Andersen & Co. are also participating in the National Hospital Rate-Setting Study but were not involved in the case studies.

INTRODUCTION

A Brief Overview of the System

As authorized by legislation passed in 1971, the Maryland Health Services Cost Review Commission (HSCRC) began setting hospital rates on July 1, 1974. During the three-year implementation period, the Commission and its Executive Director worked to develop a rate review methodology for what was to be a pioneering effort in the nation: a public utility approach to hospital rate regulation.

After July 1, 1974, hospital charges could not be increased without approval from the HSCRC; methods of determining costs were also frozen for cost-based payors. All payors but Medicare and Medicaid paid HSCRC-approved charges until July 1, 1977, when Medicare and Medicaid also began paying Commission-approved rates as part of a three-year experiment. Since mid-1977, therefore, all patient revenues in short-term general and other special hospitals in Maryland have been derived from rates regulated by the HSCRC.

Rate setting in Maryland has three fundamental objectives, as spelled out in the enabling legislation. Costs must be "reasonably related to services"; charges must be related to costs; and all payors must be treated equitably.

Several methods have been used by the Commission to set hospital rates. The system as originally designed was termed rate review. Initially, all hospitals were required to have their budgets reviewed so that costs could be assessed for reasonableness and so that costs and charges could be aligned. Departmental costs were screened, and exceptionally high unit costs (defined as those above the 80th percentile of costs for comparable hospitals) were challenged and usually disallowed. Rates were set for each patient service center by dividing allowable costs for each center by the appropriate units of service.

Because of resource constraints, the initial round of rate reviews took three years. Hospitals that had not yet been reviewed were permitted to increase their existing rates across the board by HSCRC-determined inflation factors.

Full or partial rate review is now relatively infrequent. Most hospitals receive rate increases under the Inflation Adjustment System (IAS), which consists of a complex formula designed to make retrospective adjustments for factor cost inflation, price, volume, and other variances and to provide for inflation in the future. Sixteen hospitals, all of which were selected by the Commission, are now participating in a third

system termed the Guaranteed Inpatient Revenue (GIR) system. The GIR is actually a modification of the IAS that includes additional incentives to reduce intensity of services. For each GIR Hospital, a "resource standard" is computed for each diagnosis and payor group for a selected base period. The GIR adjustment rewards hospitals for reducing service volumes relative to the standard and penalizes them for increasing intensity levels.

It is difficult to take a photograph of the Maryland system. Not only have new methods of setting rates been added to the system since its inception, but both the new and the long-standing methods have been consistently refined. When problems have arisen, the HSCRC has attempted to solve them by restructuring its methodology; developmental work has always been emphasized. There has therefore been no one system uniformly applied to all hospitals; different methods have applied to the individual hospitals at different times. The remaining sections attempt to describe as completely as possible both the mechanics of the system as it is currently structured and the changes in the system over time.

Comparative Trends in Maryland Hospitals

Figures 1 and 2 illustrate trends in utilization and selected financial data for Maryland as compared to U.S. hospitals. Data are presented for 1969-1977 for the following variables: total beds, patient days, occupancy rate, average length of stay, expense per patient day, revenue per patient day, assets per bed and expense per capita.

Throughout this period, the bed supply has increased more slowly in Maryland than in the U.S. as a whole. At the same time, patient days have increased more rapidly in Maryland, especially since 1975, which is due in part to a rise in length of stay in Maryland during that period. In contrast to the U.S., occupancy rates have been consistently rising in Maryland since the early 1970s. Increases in expense and revenue per adjusted patient day in Maryland have closely paralleled national rates of increase, although, as of 1977, absolute levels for both measures in Maryland were lower than the U.S. average.

While these trends are suggestive, no inferences should be drawn from these data about the effects of rate regulation in Maryland. Attribution of effect cannot be made until other possible explanatory factors have been taken into account.

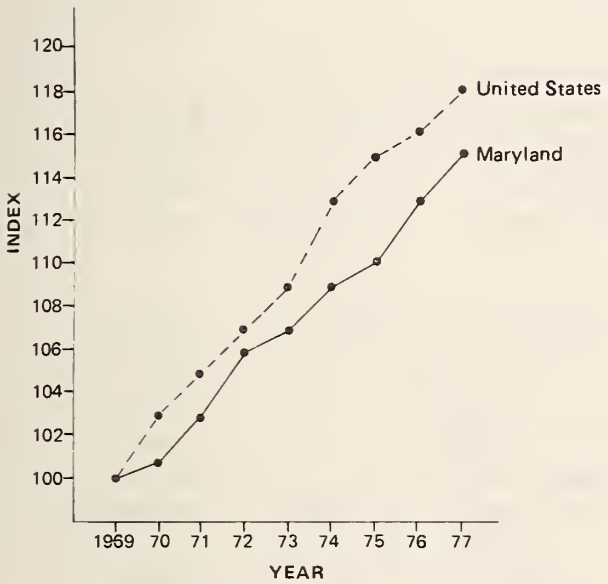
Overview of the Study

The remaining sections of this report describe in detail the history and mechanics of rate setting in Maryland. The section on adoption of the system presents a chronology of events leading up to the implementation

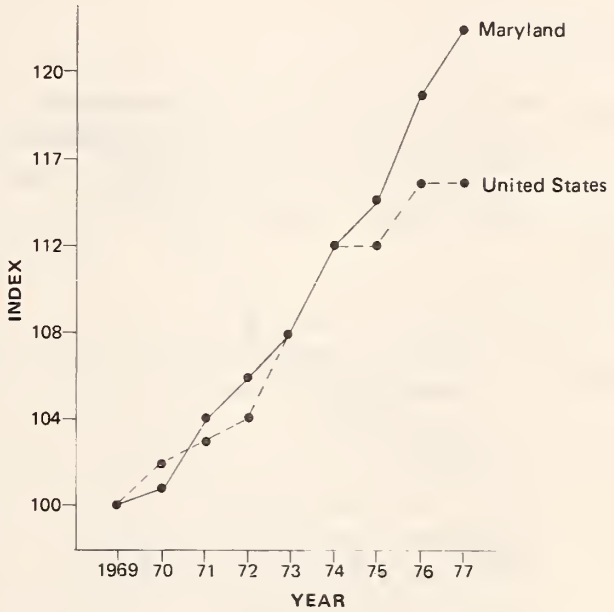
Figure 1

COMPARISON OF HOSPITAL INDICATORS:
Capacity, Volume of Service and Utilization
for Community Hospitals, 1969-1977
MARYLAND vs. U.S.

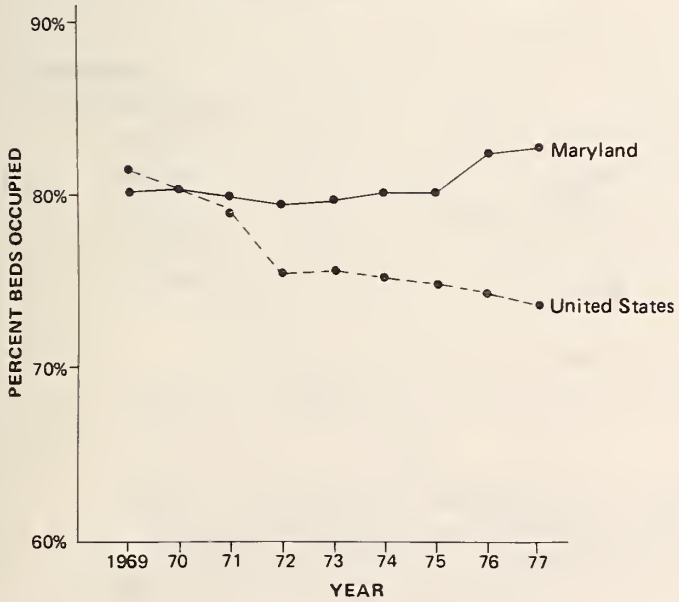
INDEX OF TOTAL BEDS
(1969 = 100.0)



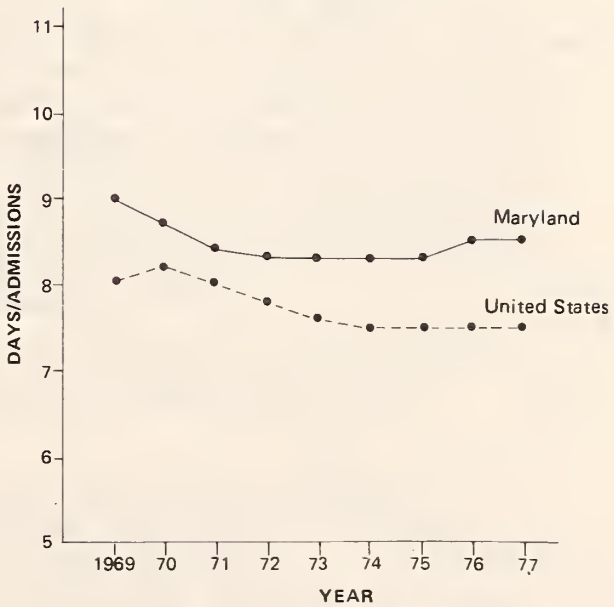
INDEX OF ADJUSTED PATIENT DAYS
(1969 = 100.0)



AVERAGE OCCUPANCY RATES



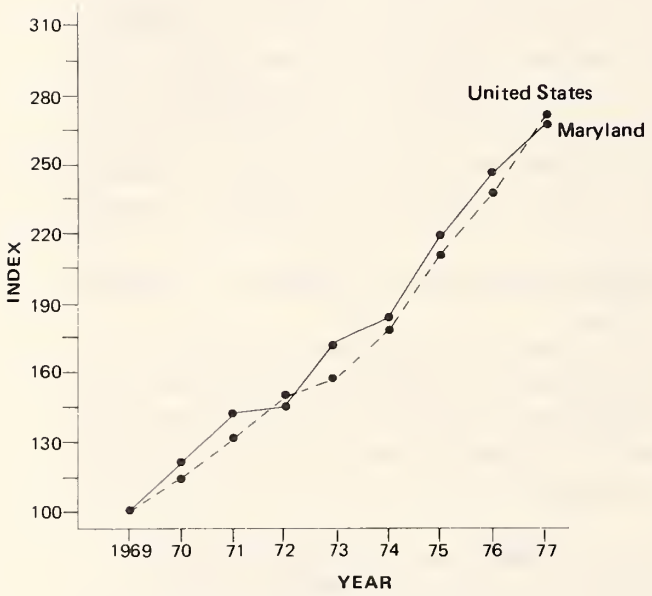
AVERAGE LENGTH OF STAY



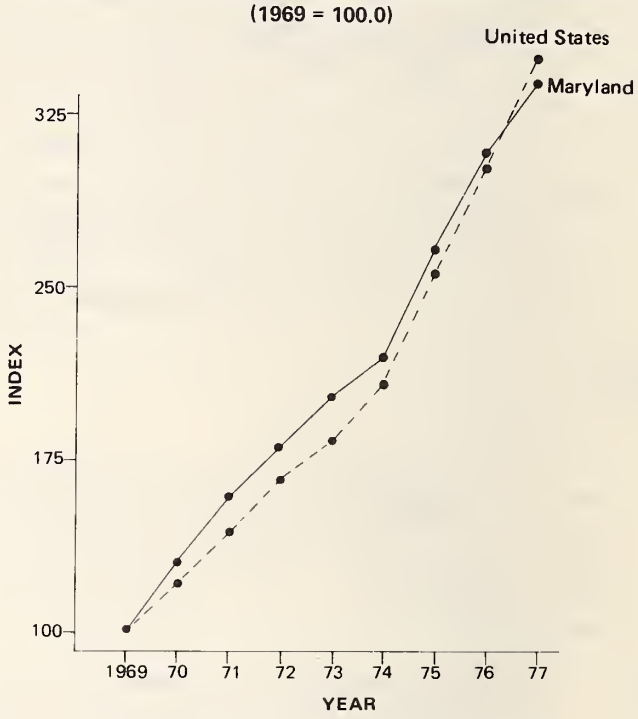
Sources: U.S. Bureau of the Census
American Hospital Association, *Hospital Statistics*

Figure 2
COMPARISON OF HOSPITAL INDICATORS:
Expense, Total Revenue and Assets
for Community Hospitals, 1969-1977
MARYLAND vs. U.S.

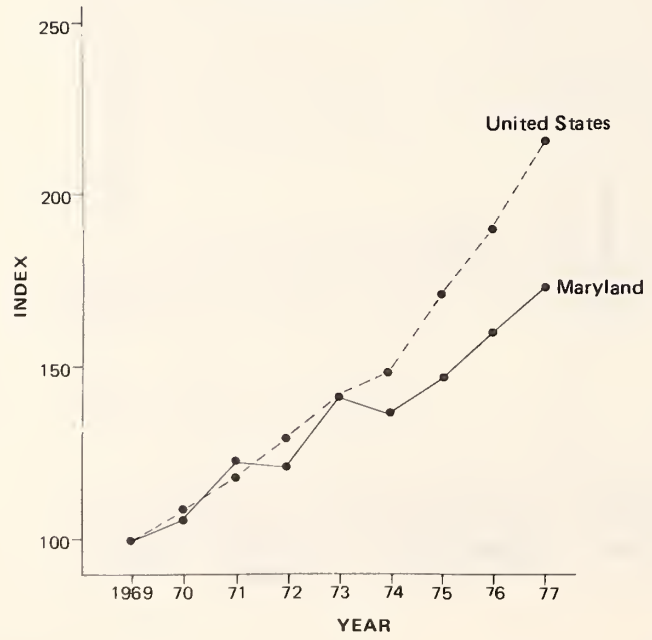
INDEX OF HOSPITAL EXPENSE PER DIEM*
(1969 = 100.0)



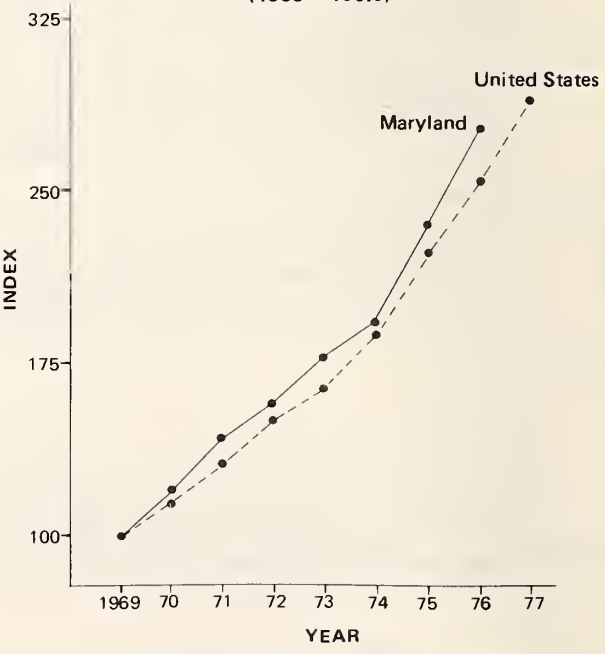
INDEX OF TOTAL HOSPITAL REVENUE PER DIEM*
(1969 = 100.0)



INDEX OF ASSETS PER BED
(1969 = 100.0)



INDEX OF HOSPITAL EXPENSE PER CAPITA
(1969 = 100.0)



*Per adjusted patient day.

Sources: U.S. Bureau of the Census

American Hospital Association, *Hospital Statistics*

of the HSCRC's early rate-setting activities. The content and process section describes the mechanics of the various components of the Maryland system, as well as the developmental work currently in progress. The section on interaction describes the impact of the system on the various payor groups, as well as the interactions between the Commission and other key agencies and organizations. Finally, a preliminary assessment by the site-visit team of the rigor and equity of the program, as well as of the program's incentives in light of what was learned about its structure, processes, and outcome, is offered.

ADOPTION

Legislation authorizing the formation of the Maryland Health Services Cost Review Commission was the result of a combination of factors: strong interest on the part of the Governor and key legislators; the financial plight of Baltimore's inner city hospitals; and the hospitals' acceptance of the inevitability of some form of regulation.

The years 1967 to 1969 can be regarded as the formative period for legislative action.[1] Nevertheless, concern over rising hospital costs prompted formal study as far back as 1964, when the State of Maryland Commission to Study Hospital Costs, chaired by Herman L. Gruehn, investigated areas for possible cost reduction. Three years later, a bill was introduced in the Maryland General Assembly by then-Delegate Rosalie Abrams, a member of the Gruehn Commission. The bill would have created a Council for Hospital Affairs, which would be authorized to investigate hospital operations, review plans for new facilities, and encourage utilization review. However, the bill died in committee.

Other cost control bills were introduced between 1967 and 1969. One was a result of the work of a special committee set up by Governor Spiro Agnew to investigate hospital costs and health services administration (the Nelson Committee). While Delegate Abrams' original proposal called for a majority of the hospital commission to be independent of the industry, the Nelson Committee's proposal weighted the Commission with industry representatives. Another bill introduced by Delegate Abrams would have established a commission with record-keeping and rate-setting powers.

In 1970, a major bill was introduced which provoked strong reaction from the industry, and a shift in the representation of the hospital

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[1]This discussion of legislative history draws heavily from James S. Jacobs, "Maryland Legislation on Hospital Rate Regulation: A Historical Perspective of Policy Development," mimeo, June 12, 1974.

association further changed the climate for hospital regulation in Maryland, thus laying the groundwork for eventual adoption of rate-setting legislation. The bill, introduced by Senator Harry McGuirk, would have regulated the hospitals like public utilities, with detailed procedures to be used in changing rates. The Maryland Hospital Association feared any form of regulation, and Senator McGuirk's bill focused the Association's attention on the legislative struggle. After the end of the General Assembly session, the Legislative Council, a set of committees that meets between sessions, reexamined the question of hospital rate regulation. A compromise measure that would have given the rate-setting body power only over state payments to hospitals was developed by the Council. Most of the individuals who had supported rate regulation opposed this bill.

The organizational change in the hospital industry group helped to crystallize the support for rate regulation. The Maryland Hospital Council, created in 1955, consisted of hospital administrators, and Blue Cross financed about fifty percent of its budget. In 1970, the group was reorganized to eliminate Blue Cross involvement and to make hospital trustees the constituent members, changing its name to the Maryland Hospital Association (MHA). Several observers emphasized the perspective of the trustees (as opposed to that of the administrators) as an important reason for MHA's eventual support of regulation. It was felt that trustees, as community leaders, were more interested in policy and more likely to take a broad view of the situation. Among the trustees were lawyers who had had experience in the public utility field.

The MHA set up a special committee on rate regulation to examine the alternatives. The members felt vulnerable to legislative and press criticism, and the financial plight of the Baltimore inner city hospitals was also a consideration. Blue Cross, Medicare and Medicaid did not pay for charity care and bad debts, which amounted to a high percentage of the care given in these hospitals, but the cost of this free care could not be fully passed on to other charge- and self-paying patients. Thus, one impetus for a prospective payment system was the hope that Blue Cross could be forced to pay for charity and bad debts. (Blue Cross advocated a prospective payment system based on budget negotiation, but the Insurance Commissioner would not approve it.) Thus, a key factor in the decision of the MHA to support rate regulation was its desire to get higher payments from Blue Cross.

By the next year, 1971, support for rate regulation had increased. Governor Mandel, in his State of the State message, expressed a personal interest in legislation to provide for regulation of hospital rates. On February 24, 1971, the bill that was to originate the regulatory system was introduced by Senators Abrams and McGuirk. It was written by MHA members and staff, principally James Doyle, their legal counsel,

and called for the creation of the Maryland Health Services Cost Review Commission, which would approve hospital rates and seek to promote hospital solvency. Blue Cross introduced several amendments to the bill, with the general objective of assuring that it would not be forced to pay bad debts. It was Blue Cross's position that bad debts were generated by three types of patients--government clients, those covered by other private insurance, or those with no insurance--rather than by Blue Cross patients. Blue Cross argued that its subscribers should not be forced to pay the bad debts of others and was further concerned that it would be the only third party paying bad debts.

The final version of the bill, summarized in Table 1, passed the Senate on March 24 and the House of Delegates on April 5. The legislation took effect on July 1, 1971, but rate-setting activity did not begin until July 1, 1974, three years after the effective date of the legislation. The Commission was appointed soon after the legislation took effect. The Governor, despite the objections of those who feared industry capture, chose to appoint a hospital administrator as Commission chairman, to enhance the credibility of the new system. The Commission's early meetings, which began on September 9, 1971, focused on the selection of an executive director, the selection of a firm to provide accounting assistance, and the establishment of reporting requirements.

Early Developmental Efforts

Much of the initial development work was done by the executive director, who began work in July 1972, and by the firm Haskins and Sells, which developed a questionnaire for obtaining hospital cost information. During 1972, the following items were requested from each hospital in the state:

- latest audited balance sheet;
- latest audited statement of income and expenses;
- Medicare cost reimbursement schedules;
- historical data for last ten years or number of inpatient days for last ten years;
- cost per inpatient day;
- occupancy rates;
- length of stay;
- outpatient visits and cost per outpatient visit;

TABLE 1: Summary of HSCRC Enabling Legislation

PURPOSES OF THE COMMISSION:

1. Beginning July 1, 1971, to make public the financial position of all hospitals and related institutions, including the total cost of providing care;

2. To keep itself informed about the financial viability of each institution and to concern itself with solutions when resources are inadequate;

3. Beginning July 1, 1974, to assure that rates are reasonably related to costs in each hospital and that "rates are set equitably among all purchasers of services without undue discrimination."

STRUCTURE OF THE COMMISSION:

The Commission will consist of seven members, four of whom shall have "no connection with the management or policy of any hospital or related institution." The Governor will appoint members on staggered terms initially, and for four-year terms thereafter.

No one may serve more than two terms. At least four members must concur in order for the Commission to take action. The Commission will be "an independent commission functioning within the Department of Health and Mental Hygiene."

POWERS AND DUTIES:

1. The Commission will have jurisdiction over all hospitals and related institutions.

2. The Commission shall employ an executive director and other staff as appropriate. The executive director, deputy director, and principal section chiefs serve at the pleasure of the Commission.

3. The Commission may hold public hearings, subpoena witnesses or documents, and require filing of information relating to any matter affecting the costs of services.

TABLE 1 (Continued)

POWERS AND DUTIES (continued):

4. The Commission shall establish a uniform system of accounting for hospitals and related institutions. The Commission shall require financial reporting by all institutions at least annually. It may prescribe penalties for failure to report. All reports (except privileged medical information) shall be open to public inspection. The Commission has the authority to audit or otherwise examine records and accounts to verify the accuracy of reports.

5. The Commission shall engage in studies relating to health care costs, the financial status of institutions, or other related matters. The Commission shall also require the filing of information about the financial needs and resources of institutions, including the effect of proposals made by health planning agencies.

6. Beginning July 1, 1974, "the Commission shall have full power to review and approve the reasonableness of rates established or requested by any hospital subject to the provisions of this subtitle. No hospital shall charge for services at a rate other than those established in accordance with the procedures established hereunder." This requires that the Commission shall permit institutions to charge "reasonable rates which will permit the institution to render effective and efficient service in the public interest. . . ."

RATE REGULATION PROCESS:

Beginning July 1, 1974, hospitals may not change rates without Commission approval. Request for rate change must be filed at least thirty days before the effective date, unless otherwise ordered by the Commission. Upon receipt of notice, the Commission may, if it deems necessary, hold a public hearing. The Commission may suspend the effective date of the change until thirty days after the hearing. In any event, the review may not take more than ninety days from the date of the filing. If there is no public hearing, the limit for the review period is sixty-five days. Aggrieved persons may appeal decisions of the Commission.

- room rates by accommodation;
- total operating expenses; and
- bottom line profits or losses.

All data were made available to the public as required by the legislation. In general, cooperation by the hospitals was good.

Another priority task was the development of relationships with related state agencies. During the developmental period, the Commission and Commission staff exchanged ideas with representatives of the Comprehensive Health Planning Agency, the State Advisory Board, other departments within the Department of Health and Mental Hygiene, and the hospital industry.

The first Uniform Accounting and Reporting System for Hospitals was promulgated on April 1, 1973. The system was designed to serve a number of purposes, including:

- the separation of patient care costs from auxiliary enterprises, education, research, and other activities;
- the separation of overhead costs from individual patient care centers;
- the identification of the relative cost of in-house versus contracted services;
- the isolation of operating expenses from capital facilities expenses; and
- the separate reporting of costs of hospital-based physician services.

A somewhat less elaborate uniform accounting and reporting system was implemented for nursing homes and other related institutions (group homes, halfway houses, etc.) under Commission jurisdiction, but the Commission did not vigorously pursue the regulation of these related institutions. Harold Cohen, Executive Director of HSCRC, believes that the major cost problems occur in hospitals and that regulation of small institutions would not be cost-effective.[1]

[1]In 1977, the legislature removed related institutions other than nursing homes from the Commission's jurisdiction. The legislature also provided that the Commission did not need to set nursing home rates until the state and the federal government agreed to accept Commission rates.

The Commission and staff also displayed a strong interest in health planning from the beginning. Representatives of the Commission and the Comprehensive Health Planning Agency discussed ways in which they could exchange information and analysis about applications for expansions and new facilities. The Executive Director performed a study of the cost of excess beds in the state, which concluded that the cost of unoccupied beds amounted to between fifteen and twenty percent of the hospital bill. In response to the study, the Commission supported a moratorium on additional beds in the Baltimore area and encouraged a wider moratorium until it could study the hospitals' financial plans. A hospital feasibility model was developed to evaluate planning applications. Large projects should not be approved, the Commission declared, without studies to verify their financial feasibility.

Development of Rate Review Methodology

The development of a rate review methodology became the Commission's highest priority during fiscal 1974. In August 1973, the Commission established a Rate-Setting Methodology Committee and an Industry Advisory Board. The Rate-Setting Methodology Committee was chaired by the Executive Director and included the Vice Chairman of the Commission, a representative of Haskins and Sells, and other technical advisors. The Industry Advisory Board consisted of hospital and nursing home representatives, representatives of hospital employees, third-party payors, representatives of other interested agencies, and consumers. The two bodies established joint subcommittees, which made recommendations to the Commission.

The main principles of the original methodology established include the following:

- Subsidization across departments is generally not permitted. Patients may not be charged for losses in business activities, such as parking lots or gift shops.

- Depreciation is not included in rates; instead, a capital facilities allowance based on cash needs and needed beds is included.

- Acceptable variations in hospital budgets are adjusted in future rates.

- All payors must bear the burden of charity and bad debts. Nevertheless, payors who work to reduce the charity and bad debt load (Blue Cross, and later, Medicare and Medicaid) get a four percent differential. In addition, all patients and payors who pay within thirty days are entitled to a two percent discount.

Even in the developmental stage, the Commission interpreted its mandate broadly. Sweeping legislation opened the way for Commission involvement in every aspect of hospital financing, including the planning process.

For the purpose of rate regulation, a budget review procedure was developed, but it soon became apparent that thorough budget reviews of each hospital could not be done within a short period of time. Much of the developmental work was done by outside contractors, and the Commission did not have a large staff of rate analysts. Therefore, some sort of interim system was necessary.

It was decided that the Commission would freeze the system as of July 1, 1974. For charge-based patients, actual rates were frozen; for cost-based patients, the method of determining costs was frozen. Every six months, flat percentage adjustments were allowed. Hospitals could file rate applications at any time for other rate adjustments. While most hospitals were regulated under this interim system, other hospitals were called in for full rate review. The first four hospitals called in were chosen on the basis of specific issues, such as high profits, large house staffs, inefficiency, and high costs. Later, the order of reviews grew more and more random. The full cycle of rate reviews took three years.[1]

The legislation and subsequent legal maneuvering permitted the Commission to establish itself as a strong body with broad authority over hospital financing, and disputes over the authority of the Commission generally were settled in the Commission's favor. For example, the first set of written regulations went through the Secretary of Health and Mental Hygiene for approval, but the Commission was concerned about the meaning of the legislation, which states that the Commission is to operate "independently within the Department." The state Attorney General declared in an opinion that the Commission has authority to issue regulations on its own, without the approval of the Secretary.

The major legal challenge to the Commission's authority was the case of Franklin Square Hospital et al. v. Health Services Cost Review Commission, filed in 1974. Twenty hospitals (four more joined later) petitioned the court to declare that any reasonable rate structure charged or proposed by the hospitals must be approved and that hospitals could not be forced to accept a capital facilities allowance in lieu of depreciation. While the Circuit Court for Baltimore County ruled in favor of the hospitals, the final resolution in the Maryland Court of Appeals in 1977 upheld the Commission's contention that it has authority to approve the most reasonable rate structure on a hospital-by-hospital basis.

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[1]See the content and process section for details on the first round of rate reviews conducted.

Blue Cross participated in the Franklin Square case, challenging the authority of the Commission. The court ruled, however, that Blue Cross was not a "purchaser" of services and therefore could not intervene directly in the case. The legislation was ambiguous about whether Blue Cross had to pay Commission rates, but the Insurance Commissioner, who is responsible for regulating Blue Cross, said that Blue Cross did have to adhere to the Commission's rates.

Legislative amendments from the 1975 session also clarified and, in general, bolstered the authority of the Commission. The amendments provided that:

- the Commission may apply any reasonable, relevant, or generally accepted accounting principle in determining reasonable rates;
- state hospitals were removed from the Commission's rate review jurisdiction;
- the Commission has 150 days to review a regular rate application when there is a public hearing;
- Commission decisions may be appealed directly to the courts rather than through the Board of Review of the Department of Health and Mental Hygiene; and
- a hospital may accept a partial rate allowance without affecting its rights of appeal as to the disallowed portion.

The legislation and subsequent litigation permitted the Commission to further establish itself as a strong body with broad authority over hospital financing. The Commission spent substantial time selecting an accounting firm with extensive experience and an executive director with experience in both utility regulation and the health care field.

In drafting the legislation, the MHA thought it had written "approve" rates rather than "set" rates. Nevertheless, the Commission established general principles for rate regulation early in the process.

CONTENT AND PROCESS

Organization and Objectives of the Agency

The Maryland Health Services Cost Review Commission consists of seven Commissioners appointed by the Governor for four-year terms. No more than

four Commissioners may be industry representatives, and a Commissioner may serve no more than two terms. The Commissioners serve part-time. Meetings are held once a month, and Commissioners receive a small stipend per meeting.

After some initial ambiguity, it was determined that the Commission functions independently of the Department of Health and Mental Hygiene (DHMH), in which it is located for budget purposes only. Appeals of Commission decisions do not go to the DHMH's Board of Review but directly to the courts. None of the Commissioners is an employee of DHMH, and none serves on any other state boards. The Commission's Chairman, who is nearing the end of his second term, is a hospital administrator, and there is one physician on the Commission. Throughout its history, the Commission has functioned as a body of individuals rather than as a coalition of interest groups.

The Executive Director of the Commission is hired by and serves at the pleasure of the Commission. Harold A. Cohen, the Executive Director, was the first staff person hired. His background is in utility regulation and health economics. Major department heads also serve at the pleasure of the Commission, while lower-level staff work under the state Civil Service system.

Overall Objectives of the HSCRC

Most of the operating goals of the Commission are grounded in its legislative mandate, although the broader legislative goals have been given more precise meaning as they are interpreted and implemented by the HSCRC. The goals of rate review are threefold:

1. Rates approved should be "reasonable."

   Hospitals' base costs for each type of service are assessed for reasonableness, according to the specific interpretation contained in the rate review methodology;

2. "Rates are reasonably related to costs."

   Interdepartmental cross-subsidization is eliminated under the HSCRC system. It is also the Commission's policy to align overall costs and revenues, eliminating profits, since growth within the hospital industry is believed to be unnecessary;

3. "Rates are set equitably among all purchasers of service without undue discrimination."

Cross-subsidization among payors was also eliminated as of July 1, 1977, when Medicare and Medicaid began paying Commission rates. All payors in the state now pay the same HSCRC-approved rates.

Timing

Figure 3 summarizes the formal process of applying for changes in rates under both regular rate review and the Inflation Adjustment System.

For a variety of reasons, the Maryland system has never worked on a regular cycle in which all hospitals apply for and receive rate increases at the same time. Hospitals can apply for--or the Commission can initiate--a rate review at any time. Once an application has been filed, certain procedures must be followed. The Commission has a total of 150 days to make a decision. As previously described, the initial cycle of rate reviews lasted three years, from 1974 to 1977. Interim inflation adjustments were permitted for unreviewed hospitals every six months.

Regular rate periods have evolved under the Inflation Adjustment System so that hospitals now generally apply annually for an inflation adjustment. Rate periods for the various hospitals begin during each of the twelve months, so as to avoid an unmanageable number of applications during any one month. Again, the time frame and sequence of events for the process is spelled out, but there is no regular cycle in which all hospitals receive adjustments at the same time.

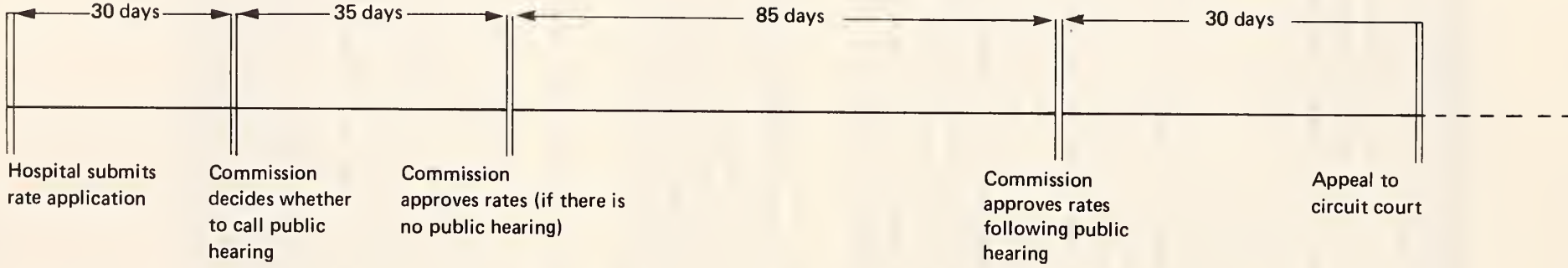
Process

Overall Summary

As it has evolved, hospital rate setting in Maryland currently consists of three components: full or partial rate review, an inflation adjustment system, and a Guaranteed Inpatient Revenue (GIR) system. The latter two components were developed in response to perceived problems in the system as it was initially structured. Depending on the particular hospital, the components may be applied to hospitals either individually or, occasionally, in combination. Table 2 presents an overview of the system's components as well as a chronology of their application. Subsequent sections will describe both the objectives and mechanics of each component.

Figure 3
TIMING OF MARYLAND RATE-SETTING PROCESS

RATE REVIEW


30 days
35 days
85 days
30 days
Hospital submits rate application
Commission decides whether to call public hearing
Commission approves rates (if there is no public hearing)
Commission approves rates following public hearing
Appeal to circuit court

INFLATION ADJUSTMENT SYSTEM

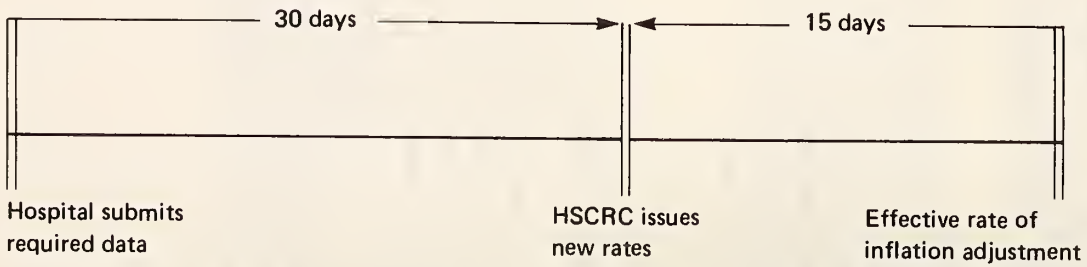


TABLE 2: Chronology of Maryland Hospital Rate-Setting System

Date Instituted	Component
July 1974	Full rate review for each hospital with interim increases for inflation authorized for those hospitals yet unreviewed. HSCRC rates paid by all payors except Medicare and Medicaid
Late 1975/ Early 1976	First application of Inflation Adjustment System (IAS)
August 1976	First application of Guaranteed Inpatient Revenue (GIR) system to selected hospitals
July 1977	Medicare and Medicaid pay HSCRC rates

The detailed rate review methodology developed during the three-year implementation period was first applied to hospitals in July 1974, based on budget data submitted two months previously by all hospitals to the HSCRC. Under the law, hospitals were required to charge only Commission-approved rates, so until rates could be set for each hospital individually, hospitals had to continue to charge those rates in effect as of July 1, 1974. Due primarily to resource constraints, the rate reviews for all the hospitals in the system were completed over a three-year period, which ended with the formal entry of Medicare and Medicaid into the system on July 1, 1977. While hospitals were awaiting rate review, they were given the option of raising their rates across the board by HSCRC-approved inflation factors.

The rate review system encompasses a rather complex methodology and consists of several components. The unit of analysis is primarily the department, or patient service center (e.g., operating room, laboratory), and in the end, rates are set separately for each center. The allowed charge for each center results from dividing total approved costs for each department by budgeted units of service; the hospital must charge these rates on average. The units of service, of course, vary for each revenue center. Operating room charges, for example, are based on minutes of OR use. Units of service for each department were defined at the outset of the program, and with one minor exception, have remained the same since that time.

Total approved revenues are derived from four component parts: direct and allocated indirect departmental expenses, a capital facilities allowance for buildings and equipment, other financial considerations (including bad debts and charity care as well as working capital), and a markup to compensate for the payor differential that gives discounts to certain payors (necessitating higher charges for the others).

Since the program was first implemented, all hospitals have undergone a full rate review at least once. A number have been reviewed subsequently, either in full or in part, although a second formal round of rate reviews has not yet begun. As the process is now structured, hospitals may elect a full or partial[1] rate review or, alternatively, they may choose to apply periodic inflation adjustments to their base rates. Most hospitals have chosen the latter route for reasons that will become apparent.

The inflation adjustment system (IAS) was developed during the early stages of the program in response to the perceived need for a system that would allow hospitals reasonable rate increases while at the same time cutting down on the administrative burdens that rate review entails. As it has evolved, the IAS is largely a mechanical process for computing a hospital-specific percentage increase to be applied to existing rates. The bottom line percentage increase builds in an inflation factor for labor and non-labor components and also includes retroactive adjustments for price variances (i.e., over- or undercharging), volume variances, and unusual costs recognized as pass-throughs by the HSCRC.

The inflation adjustment system involves less data submission by hospitals and considerably less analysis by HSCRC staff. Since the process is so mechanical, the chief role of the rate analyst is to verify the data submitted by the hospital (mainly by reconciling the IAS application data with the data submitted in the mandatory quarterly reports filed with the HSCRC for monitoring purposes) and then work the data into the IAS formula to produce an overall inflation factor for each patient service center.

Finally, the most recent addition to the rate-setting system in Maryland is termed the Guaranteed Inpatient Revenue (GIR) system. At present, the GIR has been applied only to selected hospitals, including all those with more than 400 beds. Like the IAS, the GIR was conceived in response to perceived shortcomings of the system as it was structured.

Soon after the program was implemented, it became clear that a departmentally based charge structure was providing an incentive to increase volumes of services. This issue was first raised by Blue Cross, who uncovered the problem in its payments data. To remedy this problem, analysts

[1] A partial rate review involves only certain aspects of the hospital's operation, such as review of an overcharging penalty.

on the Commission staff designed the GIR system, which attempts to control the increase in cost per case, allowing only increases for inflation and a small additional amount for "growth and technology."

To briefly summarize, the GIR amount is computed using the hospital's own discharge data (by diagnosis) for a selected base period. The average charge for each diagnosis for each of four payor groups is computed for the base period for each individual hospital, and that average charge becomes the resource standard. For each subsequent year, the charge for each diagnosis is allowed to increase by an overall inflation factor plus an additional one percent for growth and technology. The products of the number of discharges in each category and the allowed charge in each category are summed at the end of the rate year to form a total, which is termed the Guaranteed Inpatient Revenue. The hospital continues to charge the rates approved by the Commission. If its total revenues at year end are less than the GIR, the hospital will receive the variable cost portion of the saving (approximately one-half the difference unless the decreases are large, in which case the proportion will be higher). If, however, its total revenues are greater than the GIR, the excess will be taken back the following year. The process of paying the hospital or recouping payments from it occurs during the GIR adjustment and is incorporated in the IAS for the GIR hospitals.

This brief outline of the components of the Maryland system is supplemented by considerably more detail about the three system components, as well as the legal and political environment in which the system operates, in the following sections.

Interim Inflation Adjustments

As of July 1, 1974, no rates charged by hospitals in Maryland could be changed without Commission approval. The result of this provision of the law was a freeze on the rate structure in place at that time.[1] HSCRC policy allowed hospitals to maintain the financial position they had as of this date until their rates were reviewed, which meant that hospitals not yet reviewed during the early years of the program were periodically allowed to raise their rates across the board by an inflation factor determined by the HSCRC.[2] The percentage increases reflected widely used inflation indices and represented a weighted average for five components of hospital costs. Weights were determined on the basis of a sample of hospital cost data, and they were not hospital specific for this interim adjustment. The basis for computing the interim inflation factor is shown below.

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[1]It should be noted that this occurred three months after the lifting of federal controls under the ESP.

[2]Generally, however, the HSCRC Order stipulated that no rate increase should be effected for radiology and pathology services, since both were known to be profit-making centers.

Cost Category	Proportion of Total Costs (Percentage)	Inflation Index
Payroll	66.6	BLS* average hourly earnings for nonsupervisory hospital employees
Supplies	21.5	Estimated from BLS wholesale and consumer price indices
Fuel	1.8	Estimated from BLS wholesale and consumer price indices
Food	4.3	Estimated from BLS wholesale and consumer price indices
Interest and depreciation	5.8	No inflation impact assumed
	100.0	

*Bureau of Labor Statistics.

Thus, the overall inflation factor was determined by first weighting increases in the various inflation indices by the proportion of total costs accounted for by the appropriate cost component, and then summing the weighted increases of all five components. The Commission assumed that interest and depreciation, representing 5.8 percent of total costs on average, were fixed costs requiring no inflation adjustment.

Interim inflation adjustments for unreviewed hospitals were computed approximately every six months. The HSCRC Orders made it clear that the allowed increases could be put into effect at the hospital's discretion, either as a one-time increase, in phases, or not at all. To encourage postponement of rate increases, each subsequent Order computed the allowed inflation factor for the period beginning July 1, 1974, so that if hospitals did not need to increase their rates at the time one Order was issued, they could wait and increase them at the time of the next Order by the total amount they would have been allowed had they increased rates on both occasions. For example, the HSCRC Order effective February 15, 1976 allows hospitals to raise rates a total of 13.1 percent over those in effect on July 1, 1974. If, therefore, a hospital had elected not to increase rates by 5.6 percent in January 1975 or by an additional 3.46 percent in August 1975, it could allowably increase them by a maximum of 13.1 percent in February 1976. With each Order, of course, the number of hospitals eligible to receive the interim increases diminished, since more had since undergone rate review.

Upon the issuance of a Commission Order, unreviewed hospitals were permitted to raise their rates according to the terms specified without obtaining prior approval. They were, however, required to submit to the Commission written notification that they had increased their rates and to provide data on the expected effect of the increase on their net revenues. If additional data were supplied on actual experience in malpractice insurance expenses and pension funding requirements, adjustments beyond the inflation factor would be received. In addition to the composite inflation factor, hospitals were permitted to pass through malpractice insurance and pension funding increases (subject to HSCRC approval on a case-by-case basis).

Rate Review

The methodology that was initially developed for rate setting in Maryland was essentially a budget review system that examined operating costs departmentally and assessed overall capital needs and other financial requirements. The review process resulted in a set of rates approved for units of service in the various revenue-producing departments ("patient service centers").

Initial budget submissions were completed by all hospitals covered under the system (all nonfederal short-term general and special hospitals) in June 1974, with review to begin the following month. Due to a lack of staff resources, the initial round of budget reviews was protracted over three years. However, hospitals awaiting rate review were permitted to raise their rates in the interim by inflation factors determined by the HSCRC, as has been previously described.

Rate Review Methodology. The elements of cost included in the rate base consist of two components, which include a total of six expense categories: operating costs (including salaries, wages and fringe benefits, and supplies and purchased services) and other financial requirements (including capital costs, working capital, charity care, and bad debts). Operating costs are evaluated for each department; other financial requirements are annually evaluated for the hospital as a whole and then allocated to the various revenue centers.

Rate review requires hospitals to provide detailed data on their finances and utilization. Budget submissions include information on all direct operating costs for patient service centers (such as intensive care units, emergency room, and laboratory), as well as operating costs for general service centers, or overhead departments (such as nursing service administration, communications, maintenance, and intern and resident staff). In addition, data are obtained on capital costs, new programs, revenues by source, and other expenses and revenues relating to auxiliary

enterprises (such as parking lots) and institutional programs (such as a nursing school), as well as other selected expense categories.

Hospitals report data for two years: the base year and the budget year. The base year is the current fiscal year. Originally (for the initial round), base-year data constituted nine months' actual and three months' projected data. Currently, the reports include twelve months' actual data. The budget year is the following fiscal year for which rates are to be approved (and for which all data must be projected). When completing the various schedules, the hospitals project individual budget-year volumes, but budget-year expenses are projected according to inflation factors supplied by the HSCRC.

For each patient service center, the volume is measured in units of service that will eventually become the bases for setting rates. The units of service, which with one minor exception have remained the same since the program began,[1] are shown in Table 3. Therefore, volume projections are a critical element of the rate review process. Volume estimates for inpatient, outpatient, and ancillary service centers are built from three components: prior-year actual volumes, estimated changes due to market area characteristics (such as change in age distribution or introduction of new programs in the area), and estimated changes attributable to internal hospital characteristics, such as additions to the medical staff.

Budget-year expenses are projected from normalized and annualized base-year expense data, inflated. Normalization converts costs incurred during only part of the fiscal year (e.g., for an employee hired during the course of the year) into full annual costs. Similarly, annualization converts actual cost data available for part of a year into full-year costs by extrapolation. Typically, hospitals filing rate review schedules work with nine months' actual data; to annualize, it is necessary to estimate for the remaining three months. Finally, base-year costs must be inflated to reflect budget-year costs. For both annualizing and budgeting purposes, the Commission provides inflation factors to be applied to actual and base-year data respectively; neither process is left to the hospital's discretion. Inflation factors are again taken from BLS wage and price indices and are provided separately for payroll and nonpayroll costs. When providing inflation rates, the Commission always assumes existing rates will continue into the budget year; when actual rates become available, any variances are taken into account in subsequent rate adjustments.

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[1]That is, when relative value units (RVUs) are used as the unit of service; however, they are continually updated to reflect technological change.

TABLE 3: Units of Service for Patient Service Centers

Patient Service Center	Standard Units
All daily patient care centers (e.g., medical-surgical unit, ICU)	patient days
All outpatient services (e.g., emergency room, clinic)	visits
Ancillary services:[1]	
• operating room	• minutes of use—operating time
• labor and delivery room	• number of procedures in delivery room
• anesthesiology	• minutes of service, in 15-minute units
• blood bank	• 500-cc units
• laboratory	• College of American Pathologists (CAP) 1969 California Relative Value Studies, 4th edition, 1977
• radiology—diagnostic	• HSCRC Relative Value Units, published on April 18, 1977
• radiology—therapeutic	• same as radiology—diagnostic
• nuclear medicine	• same as radiology—diagnostic
• EKG	• California RVUs; 1974 revision of the 1969 California Relative Value Studies, 5th edition, November 8, 1974
• EEG	• same as EKG
• physical therapy	• same as EKG
• inhalation therapy	• Maryland Relative Value Units, July 8, 1977
• intravenous therapy	• number of bottle starts
• speech therapy, audiology	• hours of patient service
• recreational therapy	• hours of service
• occupational therapy	• number of session hours
• vocational evaluation	• number of session hours
• pulmonary function	• Connecticut Hospital Association's RSVUs Connecticut State Medical Society, 1971 Relative Value Guide
Psychological services:	
• testing and evaluation	• number of tests
• group therapy	• number of session hours
• electric shock therapy	• number of treatments
Renal dialysis	• number of treatments
CAT scanner	• number of procedures

[1]The statistical units of measure in the ancillary services are, in many cases, relative value unit (RVU) systems. These systems assign to each test or procedure within a department a certain measure of the factor costs that might reasonably be incurred in carrying out the service. It is important to note, however, that while hospitals must, on average, charge the approved rate per unit, they need not charge for specific procedures in proportion to the RVUs assigned to those procedures. This implies that the ratio of charges may vary from one procedure to the next.

The end result of rate review is an approved set of departmentally based rates. Since the rates must be set only for revenue-producing centers, all overhead, capital, and other costs not directly associated with patient service centers must be allocated to these centers. For each department, therefore, total approved expenses must include both direct and indirect costs. Total approved expenses consist of four component parts: direct and allocated indirect costs, a capital facilities allowance, other financial considerations, and an adjustment due to the payor differential. Each of these components, which are presented in Figure 4, is discussed below.

1. Departmental Expenses

Also known as Level I expenses, departmental expenses consist of both the direct and indirect costs of operating each department. These expenses thus include labor and nonlabor costs associated directly with that department, as well as support services whose costs have been allocated across revenue centers on a statistical basis (using step-down allocation). To illustrate, total costs for the intensive care unit would include not only the costs of ICU, staff, supplies, and other expenses, but also that proportion of management services, housekeeping, laundry, nursing administration, and pharmacy costs (among others) that can reasonably be associated with operating the ICU.

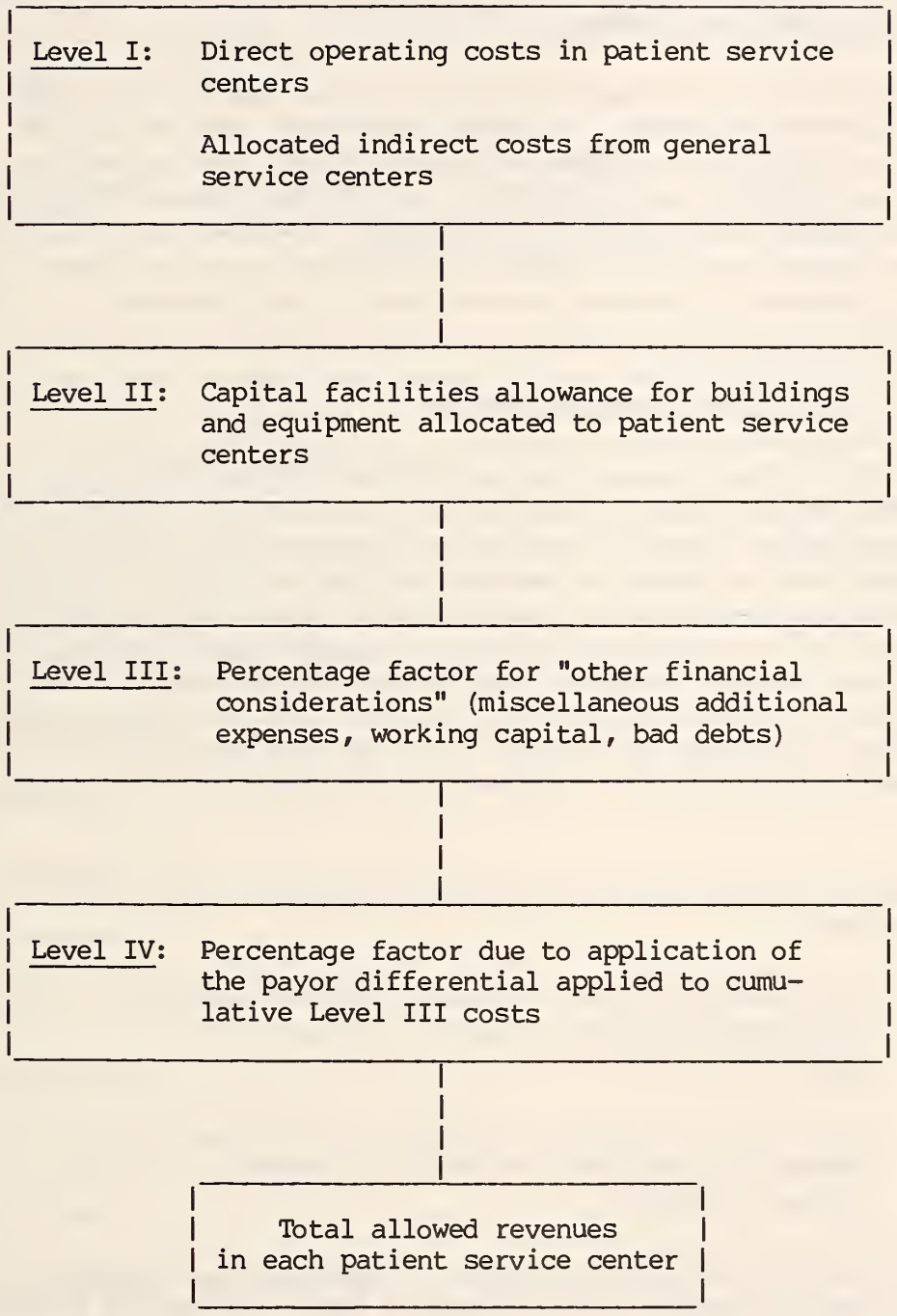
However, costs for three of the general service centers--communications, medical records, and medical staff administration--are not allocated to routine patient care centers. Rather, the routine portions of these three centers are combined into a so-called "admissions" cost center,[1] which recognizes that there is a cost associated with admission regardless of length of stay. The HSCRC felt that an "admissions charge" should be levied separately to inpatients rather than incorporated in the daily rate for routine services.

During the initial round of rate reviews, interhospital comparisons were made for all direct departmental costs per unit of service.[2] Two distinctions were made among hospitals for purposes of comparison: Baltimore hospitals were grouped separately from those in the rest of the state, and teaching hospitals were also reviewed separately. Each departmental unit cost was subjected to screens; the screening process was aided by extensive computerization of the data. The HSCRC arbitrarily chose the 80th percentile as the threshold value, so any unit cost in excess of the 80th percentile was automatically challenged. Although hospitals were given the opportunity to justify their relatively high costs, all or part

[1]These three centers were selected because their unit costs were best predicted by admissions in a regression analysis.

[2]To assure comparability across hospitals, physical costs were reviewed separately.

FIGURE 4: Components of the Rate Base


Level I: Direct operating costs in patient service centers
Allocated indirect costs from general service centers
Level II: Capital facilities allowance for buildings and equipment allocated to patient service centers
Level III: Percentage factor for "other financial considerations" (miscellaneous additional expenses, working capital, bad debts)
Level IV: Percentage factor due to application of the payor differential applied to cumulative Level III costs
Total allowed revenues in each patient service center

of the expenses beyond the 80th percentile were generally disallowed when the Commission set the hospital's rates. All departmental unit costs were screened individually with one exception: If costs in the eighteen overhead departments combined fell below the 50th percentile, those individual departments were not screened.

In general, the screening process cut out a relatively small proportion of hospitals' costs. As it was structured, the process was designed to identify excessively expensive hospitals, but for the most part it accepted certain base inefficiencies. The emphasis became one of containing cost increases, and by so doing, providing incentives for hospitals to increase efficiency. The primary vehicle used to attain these objectives was the Inflation Adjustment System (IAS), to be described in a later section.

2. Capital Facilities Allowance

In designing its methodology, the HSCRC discarded the use of conventional depreciation for buildings and equipment. Instead, the Commission substituted a Capital Facilities Allowance (CFA), which is computed separately for buildings and equipment. The use of the CFA in lieu of depreciation was grounded in the Commission's conclusion that depreciation accounting is an undesirable vehicle for reimbursing hospitals, leading to inefficient economic behavior (particularly with regard to labor-capital substitution), undercapitalization of inner city hospitals, and other inequities throughout the system.[1] The CFA was developed in an attempt to remedy the deficiencies believed to be inherent in depreciation accounting.

For buildings, the CFA provides the hospital with one of the following alternatives:

- an accumulated fund to finance a twenty percent down payment on a replacement facility of an appropriate size[2];
- enough cash to finance principal and interest payments on buildings, rentals and leases, and major repairs.

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[1]For an analysis of the deficiencies of depreciation accounting for reimbursement purposes, see "Discussion Paper for Capital Reimbursement," HSCRC, March 28, 1977.

[2]The size of the replacement facility is not necessarily equivalent to the size of the facility to be replaced. Rather, a target size for the replacement facility is identified, based on a study of the probability distribution of admissions to particular inpatient services within the particular region. Thus, in many cases, the size of the replacement facility will be smaller.

The actual amount allowed the hospital for buildings represents either an allowance toward accumulating the twenty percent down payment on a new facility or the cash requirements necessary to finance principal and interest payments on the current facility, whichever is greater. The facilities allowance is computed each year using a formula; each year, replacement cost is re-estimated in current dollars. The calculation is made as follows:

$$\text{Facilities allowance for buildings} = \frac{.20 \left[\text{target beds} \times \text{replacement cost/bed}\right]^{1} - \text{fund balance}}{\text{remaining years of life}}$$

The facilities allowance is then compared to the total cash requirements for principal, interest, rentals and leases, repair, and replacement, and the hospital is allowed the greater of the two amounts. Because of the way the system is structured, the hospitals with newer buildings will generally receive enough funding to finance their cash requirements but will not be accumulating additional funds for capital or other expenditures. On the other hand, hospitals in older buildings carrying little or no remaining debt can accumulate reserves, which they can use to finance a down payment on a replacement facility. A separate allowance is calculated for movable equipment in capital-intensive departments, including:

- operating room,
- radiology,
- nuclear medicine,
- laboratories,
- intensive care,
- coronary care,
- renal dialysis,
- CAT scanner,
- education programs,
- dietary, and
- laundry.

[1]Target beds and replacement cost/bed are both supplied by the HSCRC.

For all departments except dietary and laundry (for which separate allowances are calculated), the departmental equipment allowance consists of three components: depreciation of existing owned equipment (price-adjusted), loss attributable to disposed equipment (price-adjusted), and imputed depreciation at current market value for leased equipment.

Replacement cost (or price level) depreciation is allowed for equipment. To compute the depreciation for existing owned equipment, total acquisition costs in current dollars are "price leveled" to base-year dollars (the base year being the fiscal year just ended). Price leveling involves applying an HSCRC-supplied price adjustment (reflecting inflation since the year of acquisition) to the actual purchase price. For all equipment, a ten-year life is assumed; for each year of life--up to a maximum of ten years--the hospital is allowed one-tenth of the price-adjusted equipment cost. When equipment is disposed of, hospitals are allowed the yet undepreciated acquisition cost, which again has been price leveled, less any salvage value.

Finally, for leased equipment, depreciation is imputed using the current (base-year) purchase price of the equipment. One-tenth of this amount (again assuming a ten-year useful life) is then compared to the actual lease amount, and the difference is computed. If the difference between the actual lease amount and imputed depreciation is positive, this "leasing premium" may or may not be allowed in rates. If, however, the amount is negative, the hospital is allowed to keep the savings and will be allowed the value imputed for depreciation.

For the two remaining departments--dietary and laundry--the HSCRC provides a separate allowance per occupied bed. An additional "general" movable equipment allowance, computed per occupied bed and also supplied by the Commission, is included as well. These amounts are based on the replacement costs of general equipment, taken from a sample of Maryland hospitals.

Building and equipment allowances, once computed in total, must then be allocated to the various revenue centers for which rates will be set. The basis for allocation varies, depending on the particular allowance. The facilities allowance (the greater of the CFA or actual cash requirements) and the general movable equipment allowances are allocated to the revenue centers on the basis of the number of square feet associated with each center. Dietary and laundry allowances are allocated according to the number of patient meals served and pounds of laundry processed, respectively. Finally, specific allowances for each ancillary department listed previously are included in the respective departments, with no further allocation necessary.

In some cases, hospitals' actual cash requirements for equipment may exceed the amount allowed by the system described above. When this occurs, the required amount is reviewed for reasonableness; the excess amount may or may not be allowed, depending on the outcome of that analysis. The excess, for example, could be approved if the hospital is able to demonstrate that efficiencies have been achieved as a result of its large capital outlays.

3. Other Financial Considerations

Level III costs are the end result of a series of miscellaneous adjustments of three types: offsets for certain revenues, allowances for additional expenses not already included in operating and capital costs, and other allowances, including provision for bad debts and working capital. The calculations produce an "other financial considerations factor," which is then applied across the board to cumulative costs in all the patient service centers for which rates will be set.

Revenue offsets that are used to reduce rates include restricted and unrestricted donations,[1] endowment fund income, and other miscellaneous income from sources such as vending machine sales, rentals, or other investments.

Additional expenses that are recognized during the Level III calculations include losses from so-called "other institutional programs" (e.g., teaching programs, student housing), interest on borrowing for working capital, the excess of movable equipment cash requirements over the CFA (see previous section), and other miscellaneous expenses.[2] In addition, net profits or allowable losses from "auxiliary enterprises" (such as sales and services to nonpatients) and from operating the cafeteria are added in. The net of revenues minus expenses is then computed as a percentage of total Level II costs (i.e., capital and operating costs); if revenues exceed expenses, the proportion will be negative, resulting in a net reduction in amounts to be included in the basis for setting rates.

The final "other financial considerations factor" includes two key components in addition to the component just described. The first of these is a provision for uncollectable accounts, or bad debts. This factor is the product of the ratio of total bad debts and charity care to gross revenue, and usually amounts to between three and five percent (although for some hospitals the proportion is much higher). The second of these additional components is a provision for working capital. The HSCRC, recognizing that many patients and payors are slow to pay their hospital

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[1]Restricted donations are used to reduce rates for the services for which the donations have been earmarked.

[2]These are defined to be minor expenses of a nonrecurring nature, such as casualty losses not covered by insurance.

bills, allows an additional two percent in rates as a working capital allowance. As a quid pro quo, however, hospitals are required to give a two percent discount to patients who pay their bills at the time of discharge and a one percent discount to patients who pay within thirty days of discharge.

The final "other financial considerations" factor is thus comprised of three component factors, each of which has been computed separately:

- net profit (or loss) from particular activities as a proportion of total capital and operating costs;
- charity care and bad debts as a proportion of gross revenues; and
- a two percent allowance for working capital.

While the input data from which the first two proportions are derived are scrutinized and evaluated for reasonableness, they are not subjected to formal screens. Amounts may be questioned or lowered somewhat by the analysts, but by and large, the process of computing the factor allowed for other financial considerations is fairly mechanical, based on data from the hospital's records that are adjusted according to formulas provided by the Commission.

The factor computed is then applied to each patient service center to obtain Level III costs, which consist of operating costs and capital allowances, increased to allow for other financial considerations.

4. Payor Differential

The final series of computations adjusts the amounts on which rates are based to give discounts to the major third-party payors. The payor differential, like the factor computed for other financial considerations, is a percentage figure applied across the board to the cumulative Level III expenses. This final set of expenses forms the basis for computing rates for each patient service center.

Since July 1977, Blue Cross, Medicare, and Medicaid have been allowed a six percent discount in rates paid; four percent is allowed in recognition of the fact that these programs help to reduce bad debts and the charity care load, and two percent rewards them for prompt payment (which lessens the need for hospitals to borrow to obtain working capital). Before Medicare and Medicaid began paying HSCRC rates, the payor differential calculation was more complicated, since it had to take into account the

differences between the cost base approved by the Commission and that defined by Medicare. The amounts allowable under HSCRC regulations but disallowed by Medicare (e.g., the difference between the CFA and depreciation, interest, and lease costs) had to be reimbursed by other payors, so that, prior to 1977, cross-subsidization was built into the rates.

Currently, the computation of the payor differential takes into account payments to be made to the hospital by Blue Cross, Medicare, and Medicaid. Since for each of those payors payments will come to less than 100 percent of total charges because of the discounts they receive, charges to other payors will have to be somewhat higher to make up the difference. The payor differential is another percentage factor computed to adjust rates upward so that, when all payors have paid either discounted or undiscounted charges, the hospital will recover its operating costs for the year. Computation of the payor differential is again a mechanical process, with hospital data fed into a formula provided by the Commission. Since this factor is in essence a weighted average of payors given discounts and payors paying full charges, it will vary according to the hospital's revenue sources. Thus, the higher the proportion of charges to payors receiving discounts, the higher the payor differential, since a greater absolute discount will have to be made up by a smaller proportion of other payors.

Computation of Rates. Exhibit 1 illustrates the worksheet from which budget-year rates are computed. For each patient service center (listed in the first column and varying by hospital), total allowed costs, shown in column ten, are divided by budgeted units of service, listed in column one, to produce the approved average rate for the budget year, shown in column ten. For example, if total allowed costs in the operating room came to $1 million, and if 500,000 minutes of use were projected, the average rate per minute would be $2.

The Commission approves average rates to be charged for the various patient services, but hospitals are not bound to charge these rates for each and every service. They must, however, consistently demonstrate that, on average, unit revenues for each center will equal those approved by the Commission. For example, room rates in the medical-surgical unit may differ for private, semiprivate, and ward accommodations, but, on average, they must closely approximate the daily rate allowed by the HSCRC. Actual average charges are monitored using the quarterly reports filed by the hospitals to the HSCRC.[1] These reports allow both the hospitals and the Commission to monitor charges; if the hospital finds it has over- or undercharged during one quarter, it can compensate by adjusting its charges during the subsequent quarter. It is only at the close of each

[1]See the discussion of auditing and compliance in the content and process section.

Exhibit 1 RATE COMPUTATION WORKSHEET

INSTITUTION NAME _____

INSTITUTION NUMBER _____

PATIENT SERVICE CENTER SUMMARY
AVERAGE BUDGETED RATES

BUDGET YEAR _____

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
SERVICE CENTER	V BUDGETED UNITS	D DIRECT EXPENSES	J ALLOCATED EXPENSES	LEVEL I	H3 CAPITAL FACILITIES	LEVEL II	G OTHER FIN. CONSID.	LEVEL III	PD. PAYOR DIFFER.	AVG. RATE PER UNIT
TOTALS										

fiscal year that comparison of actual and approved average charges is made to assess compliance with Commission orders.

Rate review as described above represents the formal rate-setting process in place in Maryland at the present time. Hospitals may request a full rate review at any time, or they may request a partial review, e.g., a review of an overcharging penalty. But, as was noted at the outset, most hospitals have been through only one full rate review, which established their initial rates. Most have subsequently elected to apply for rate increases under the Inflation Adjustment System (IAS), with or without the added GIR adjustment. Both of these systems are "extralegal" in that they have not been formalized in regulations and thus are not subject to the administrative and legal processes to which rate review is subject. Both of these informal systems, however, have become highly structured alternatives to rate review, which has been relegated to an adjunct procedure used mainly when hospitals are dissatisfied with their IAS rate of increase.

Inflation Adjustment System

The Inflation Adjustment System was designed primarily to eliminate the administrative costs associated with full rate review. It has, however, been structured to give hospitals rate increases to cover inflation as well as to make adjustments for past price and volume variances and to pass through certain unanticipated costs that were incurred during the previous year. The IAS consists of a long and involved mathematical formula that produces hospital- and department-specific inflation factors in a mechanical fashion.

Data submitted in an IAS rate application now consist only of actual data. Until recently, nine months' actual and three months' estimated data were submitted, but significant differences between actual and estimated amounts for the quarter estimated led to so many retrospective adjustments that the estimated quarter has been eliminated, and now twelve months' actual data are used as the basis for computing the inflation adjustment. Now, as a result, the base (or prior) year always ends three months before the effective date of the inflation adjustment. For example, the basis for computation of an inflation adjustment which would be effective July 1, 1979 would be the twelve-month period ending on March 31, 1979.

The IAS formula computes the various adjustments and applies them sequentially to the current year's approved revenue and volume to produce a new set of approved rates. The individual adjustments take into account factor cost inflation, changes in the payor differential, unanticipated cost differences for pass-through items, price variances, and volume variances. Each of these will be discussed in turn.

1. Factor Cost Inflation

Factor cost inflation adjustments are made separately for three components of hospital costs: salaries and fringe benefits; food, supplies, utilities, and other expenses; and capital facilities allowance (equipment only).[1] The final computation of the inflation factor weights each increase by the percentage of total costs accounted for by that cost component. While the indices used to measure inflation differ for each component, the procedure used to compute each of the respective inflation factors is essentially the same.

The computation addresses three issues. First, it compensates the hospital for having allowed it too little for inflation during the past year, which will occur when the actual inflation rate is higher than that existing when the past year's rates were computed.[2] (Conversely, they will be allowed too much if the actual rate is lower, and the adjustment will result in a deduction from the coming year's rates.) The difference between the projected and actual rates is computed, and that difference plus interest[3] becomes the retroactive adjustment. This is a one-time compensation to the hospital, and the amount will be taken out of (or added back into) the next year's rates.

Second, the inflation factor includes an adjustment to bring rates to the level where they would have been if the inflation rate had been projected accurately for the previous year. Essentially, this is the ratio of the actual to the projected rates and is termed the price leveling adjustment.

Finally, the computation gives the hospital provision for future inflation. The rate of increase in the appropriate inflation index during the quarter prior to the application date becomes the projected inflation rate for the rate year. This, of course, will be reconciled with the actual rate (and retroactive and price leveling adjustments computed) the following year.

Indices used to measure inflation are mostly exogenous indicators, taken from BLS wholesale and consumer price indices.[4] The indices used are listed in Table 4. As the exhibit shows, Maryland hospitals are divided

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[1]Inflation is assumed to have no effect on existing debt service for buildings.

[2]The Maryland system has always incorporated very few "projections" or "estimates" and is gradually eliminating those few that have been used. Instead, the Commission assumes that existing levels (in price inflation or volumes, for example) will continue on into the rate year.

[3]The interest rate is the same as the current rate offered for a passbook savings account.

[4]The Commission is now analyzing wage and other survey data collected from Maryland hospitals in order to refine the index applied to rural hospitals. Also, some data from the state's hospitals are currently used as relatively minor input into the composite inflation factor.

TABLE 4: Inflation Indices Used in the Inflation Adjustment System

1. Salaries and Fringe Benefits--CPI for all urban consumers

   a. Baltimore Metropolitan Area Hospitals--Baltimore CPI for all urban consumers.

   b. Washington Metropolitan Area Hospitals--Washington CPI for all urban consumers.

   c. Rural Area Hospitals--United States CPI for all urban consumers.

   Note: Consumer Price Index for all urban consumers is issued bimonthly for Baltimore and Washington metropolitan hospitals. The United States Consumer Price Index is issued monthly for rural hospitals (Bureau of Labor Statistics No. 215-596-1154).

2. Supplies, Food, Utilities and Contractual Services--Currently 7 percent (see below).

3. C.F.A. Equipment--producer prices and price indices. Machinery and Equipment--commodity code 11.

SUPPLIES, FOOD, AND UTILITIES FACTOR EFFECTIVE APRIL 1, 1977

	(1) Percentage of Total Costs	(2) 1976 Inflation Factor	(3) Product of Columns 1 and 2
Printing	3.64	6.89	.25
Medical supplies	36.57	5.00	1.83
Laundry	5.05	6.50	.33
Glassware	.91	8.74	.08
Chemicals	1.86	3.14	.06
Films	4.17	24.50	1.02
Gases	.37	7.62	.03
Blood	4.21	10.00	.42
Contracted services	8.54	7.39	.63
Professional fees	2.14	6.44	.14
Insurance	4.59	8.98	.41
Telephone	3.65	4.60	.17
Food	6.05	3.08	.19
Utilities	9.06	8.10	.73
Other	9.19	7.73	.71
TOTAL	100.00	N.A.	7.00

into three groups according to location: for Baltimore hospitals, an index for the Baltimore metropolitan area is used; for suburban Washington, D.C., hospitals, the Washington index is applied; for the remaining hospitals, the U.S. average is used.

The two adjustments and the provision for future inflation are added to produce a total percentage increase for each of the three cost components. Each increase is multiplied by the proportion of costs in that hospital that the particular component represents, and the products are added to produce a weighted average inflation factor.

Table 5 summarizes the three types of adjustments made during the IAS calculations.

TABLE 5: Types of Adjustments Made By IAS

RETROACTIVE:

Increases or decreases next year's rates to compensate for aspects of hospital's experiences in the current year

For example, the hospital will be penalized for overcharging during the current year by having its next year's rates reduced by the amount of the overcharge.

PRICE LEVELING:

Increases or decreases the current year's rates to bring them to where they would have been if various indices or costs had been projected accurately.

For example, if the CPI projected for the current year turned out to be lower than the actual CPI, all the hospital's current-year rates will be increased by the difference between the actual and projected rates.

FUTURE PROVISION:

Increases next year's rates to anticipate the effect of inflation on hospital's costs next year.

For example, the current year's rates will be increased by the amount of the current CPI.

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2. Differential Adjustment

This second series of calculations takes into account changes in the payor mix of patients. The calculation of the payor differential was described earlier; the amount, of course, depends on the proportions of charges to Blue Cross, Medicare, Medicaid, and other payors. If the actual proportions differ from those projected, the hospital will be over- or underpaid.

Using the latest available data (from a permanent rate application) on total charges to the various payors, the differential adjustment compares the actual payor differential to the one already provided in the current rates. The difference, plus interest, is included as a one-time retroactive differential adjustment. Current rates are then adjusted for the difference between the previous and recalculated differentials in the prospective differential adjustment (similar in principle to the price leveling adjustment for actual inflation).

3. Other Adjustments

In a series of calculations similar to those described above, adjustments are made both retrospectively and prospectively for differences between actual and projected rates for FICA. A "net overall inflation adjustment" is formed from the weighted average inflation adjustment, the retroactive and prospective differential adjustments, and the retroactive and prospective FICA adjustments. This factor is applied later to all patient service centers across the board.

The IAS also adjusts for certain uncontrollable costs that the HSCRC allows as pass-throughs. These include government-mandated cost increases (e.g., unemployment insurance), malpractice insurance, and debt service for new projects (if approved by the Commission).[1] Although adjustments are made through use of a detailed formula, the principle is again the same: the hospital is allowed a one-time payment for the uncompensated cost increase plus a factor to provide for the excess costs in the following year.

4. Price Variances

Computation of total price variances determines the total amount of over- or undercharging by the hospital during the past year. The total price variance is an amount, computed departmentally, consisting of two

[1]See the content and process section for a discussion of new programs and the section on program rigor, incentives, and equity for a discussion of HSCRC-Certificate of Need interaction.

components. The first, the projected price variance adjustment, looks only at the three months for which data were estimated for the previous inflation adjustment (i.e., the three months prior to the effective date of the adjustment). The difference between the actual and projected rates is multiplied by the actual volume to arrive at the total overcharge (or undercharge). The second component, the price variance adjustment, is the total amount over- or undercharged during the remainder of the period covered by the last inflation adjustment for which actual data were available. This again is the difference between actual and approved rates multiplied by the actual units of service. Interest charges are levied on all overcharges.

Beginning January 1, 1979 (but applicable to the period beginning July 1, 1978), the Commission will impose stricter penalties on overcharging, as well as limits on recovery of undercharges. Corridors have been established for overcharges within various cost centers, and if average rates charged during the year exceed the corridors, 140 percent of the amount overcharged will be taken out of the following year's rates. The specific corridors are shown below.

Patient Service Center	Percentage of Rate Overcharge Allowed Without Penalty
Routine and admissions	1 percent
All ancillary services except labor/delivery and renal dialysis	3 percent
Laboratory	4 percent until 6/30/79 3 percent after 7/1/79
Labor/delivery and renal dialysis	5 percent

For example, if a hospital overcharges by less than 1 percent for the ICU, 100 percent of the overcharge (plus interest) will be taken back. If it overcharges by 2 percent, 140 percent of the overcharge (plus interest) will be taken back.

The new regulations also limit the recovery by hospitals of undercharges in certain centers. Specifically, for obstetrics, nursery, labor/delivery, clinics, emergency rooms, pediatrics, and ICUs, hospitals will only be able to recover undercharges of up to two percent of approved rates.

The IAS thus automatically recovers with interest all overcharges hospitals have made during the previous year by deducting the amounts from the next year's rates. The system also allows the hospital to recover the amount of undercharges by adding these amounts into future rates. Thus, hospitals do not benefit from overcharging if they are subject to an inflation adjustment, since they will be penalized for overcharging through reductions in their new rates. Even if they are negligent about seeking a rate increase, their pricing behavior will be detected through the monitoring process.[1]

5. Volume Variance

It was noted earlier that the IAS currently takes into account no estimated, or projected, data. All inflation rates and volume levels currently existing are assumed to continue for the new rate period. At the end of that period, comparisons are made between actual and projected data and adjustments are made if there is a discrepancy. Adjustments for the inflation rate and for price variances, described above, are fairly straightforward; volume variances, however, are handled somewhat differently, since the HSCRC does not believe that costs vary directly in proportion to volume changes. In addition, the Commission wants to provide incentives for hospitals to keep volumes in check and to shift from inpatient to outpatient services whenever possible. The IAS volume variance procedure thus builds in rewards and penalties for particular utilization patterns.

As with price variances, volume variances are assessed in two stages. Volume variance adjustments are based on three assumptions or policy decisions: fixed/variable cost proportions differ for patient care and ancillary services; those fixed/variable proportions change when volume increases or decreases beyond a certain magnitude; and substitution of outpatient for inpatient surgery should be encouraged by allowing 100 percent of costs to be variable for outpatient care. Volume changes are evaluated separately for the operating room/anesthesiology and all other patient care centers.

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[1]See the discussion of auditing and compliance in the content and process section.

For the operating room and anesthesiology, a separate overall variable cost factor is computed if there has been an increase in total revenue and volume in the OR. This is the product of total inpatient and outpatient volume increases, each of which has been weighted by its assigned variable cost factor (40 percent for inpatient increases, 100 percent for outpatient increases). The variable cost factor can be represented by the following equation:

$$\text{Variable Cost Factor} = (.40)\left[\begin{array}{l}\text{proportion of}\\ \text{total volume}\\ \text{increase due to}\\ \text{inpatient increase}\end{array}\right] + (1.00)\left[\begin{array}{l}\text{proportion of}\\ \text{total volume}\\ \text{increase due to}\\ \text{outpatient increase}\end{array}\right]$$

Thus, the hospital will be rewarded with a higher variable cost factor if it has increased outpatient utilization. Without an increase in outpatient volumes, the variable cost factor will remain at forty percent, and the hospital will receive a lower fraction of the allowed rate for each unit in OR and anesthesiology than that budgeted.

For the remaining patient service centers, variable cost factors are computed based on two changes: the change in equivalent inpatient admissions (EIPA), and the change in total revenue (excluding price variances). Equivalent inpatient admissions represent the sum of inpatient admissions and the admission equivalent of outpatient visits, which is based on the ratio of revenue per admission to revenue per outpatient visit.[1]

In general, variable cost proportions are assumed to be sixty percent for routine centers and forty percent for ancillary services. However, it is recognized that these proportions change when volume changes are significant. Therefore, for volume increases over two percent, the variable cost proportion increases to seventy percent for both routine and ancillary centers, and for increases over ten percent, the proportion goes up to eighty percent. Likewise, for volume decreases of less than five percent, the variable cost factor for both routine and ancillary services is set at twenty percent. For decreases of more than five percent, a sixty percent factor is applied to routine services and a forty percent factor is applied to ancillary services. The basis for calculating the variable cost

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[1] $\text{EIPA} = \text{Total admissions} + \dfrac{\text{Outpatient visits}}{\left[\dfrac{\text{Inpatient revenue/admission}}{\text{Outpatient revenue/visit}}\right]}$

factor is not changes in volumes within the individual departments, but changes in EIPAs; thus there is no incentive to manipulate volume changes within the various patient care centers.

Both retroactive and prospective volume variance adjustments differ, depending on whether there has been an increase or a decrease in total revenue. Table 6 presents the different variable cost factors applied. A prospective volume adjustment is the first adjustment made to the past year's approved revenue. The last year's revenue is increased departmentally by the percentage change in volume multiplied by the prospective variable cost factor. For example, if approved revenue last year was $1,000, volume increased ten percent, and the prospective variable cost factor was forty percent, adjusted revenue would total ($1,000)(1.04) = $1,040.

Retroactive volume variance adjustments apply to the discrepancy between the past year's actual and projected volumes. They are computed in much the same way as retroactive price variances: the difference between the actual and projected volume is multiplied by the allowed rate, the fixed cost factor, and the interest factor, and this amount is subtracted from the next year's rates. The effect of this adjustment is to compensate the hospital for the fixed-cost portion of volume decreases that was not reimbursed last year and to take away the fixed-cost portion of volume increases for which the hospital was overpaid.

The percentages used for fixed and variable cost proportions are somewhat arbitrary; research is currently underway to refine these proportions. The volume adjustments have been carefully designed to provide disincentives for volume increases, particularly for ancillary services (the source of observed intensity increases). The volume adjustments, as well as the GIR system, have been outgrowths of the Commission's concern about rising volumes.

Computation of the Inflation Adjustment

To summarize, the main components of the IAS include the following:

- retroactive adjustments for actual rate of inflation,
- adjustments for unusual cost pass-throughs,
- adjustments for price variances, and
- adjustments for volume variances.

These are presented in more detail in the summary chart, Figure 5.

TABLE 6: Variable Cost Percentages Allowed Under the IAS

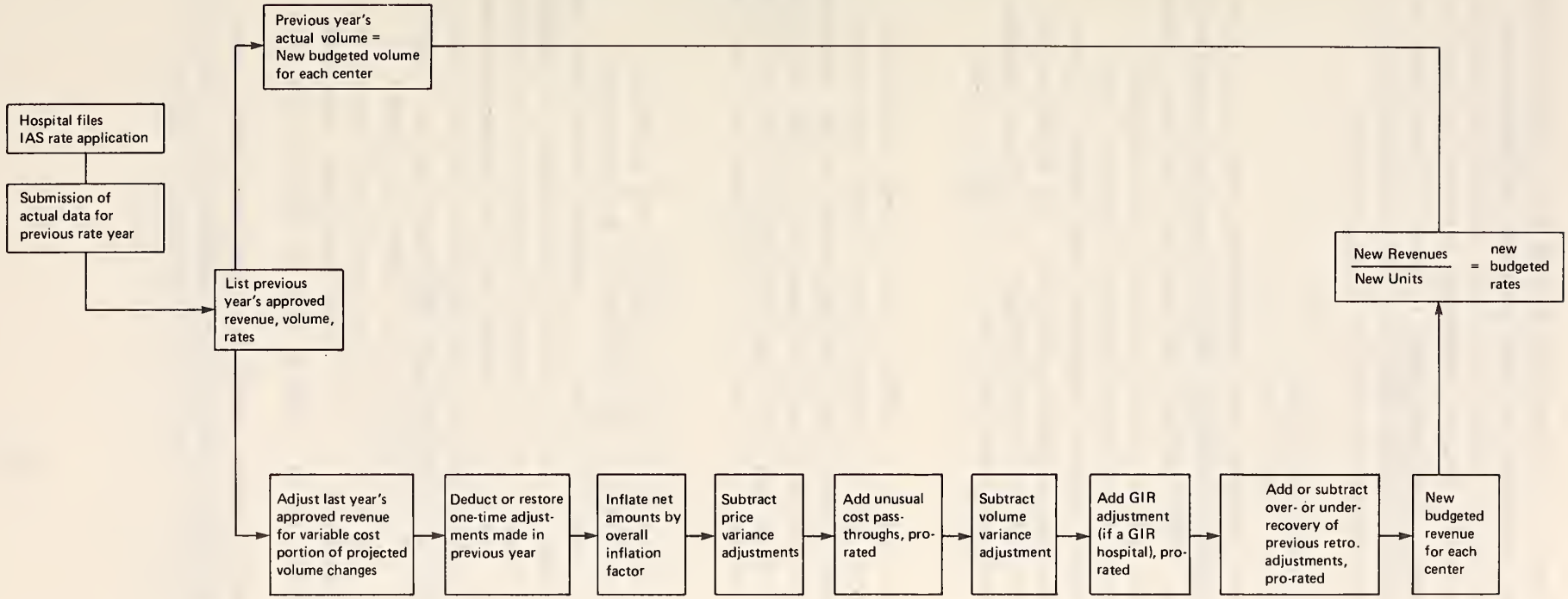
Retroactive factors:

EIPAs \ TOTAL REVENUE	Increase	Decrease
Increase	If increase in EIPAs < 2% routine = 60% ancillary = 40% If 2% < incr. in EIPAs < 10% routine = ancillary = 70% If increase in EIPAs > 10% routine = ancillary = 80%	routine = ancillary = 20%
Decrease	routine = 60% ancillary = 40%	If 0 < decr. in EIPAs < 5% routine = ancillary = 20% If decrease in EIPAs > 5% routine = 60% ancillary = 40%

Prospective factors:

EIPAs \ TOTAL REVENUE	Increase	Decrease
Increase	If increase in EIPAs < 2% routine = 60% ancillary = 40% If 2% < incr. in EIPAs < 10% routine = ancillary = 70% If increase in EIPAs > 10% routine = ancillary = 80%	routine = 60% ancillary = 40%
Decrease	routine = 60% ancillary = 40%	routine = 60% ancillary = 40%

Figure 5
SUMMARY OF THE INFLATION ADJUSTMENT SYSTEM


Previous year's actual volume = New budgeted volume for each center
Hospital files IAS rate application
Submission of actual data for previous rate year
List previous year's approved revenue, volume, rates
New Revenues / New Units = new budgeted rates
Adjust last year's approved revenue for variable cost portion of projected volume changes
Deduct or restore one-time adjustments made in previous year
Inflate net amounts by overall inflation factor
Subtract price variance adjustments
Add unusual cost pass-throughs, pro-rated
Subtract volume variance adjustment
Add GIR adjustment (if a GIR hospital), pro-rated
Add or subtract over- or under-recovery of previous retro. adjustments, pro-rated
New budgeted revenue for each center

The computation of the new set of rates under the IAS is done by computer. The computer output presents all the numerous adjustments on a complicated eleven-page, sixty-two-column printout, containing all past year data, each set of adjustments, and all budgeted revenue, volume, and rate data for the new rate year. The percentage change in rates will not be the same across all cost centers since most of the new adjustments are made either for individual departments or groups of departments.

The Guaranteed Inpatient Revenue System

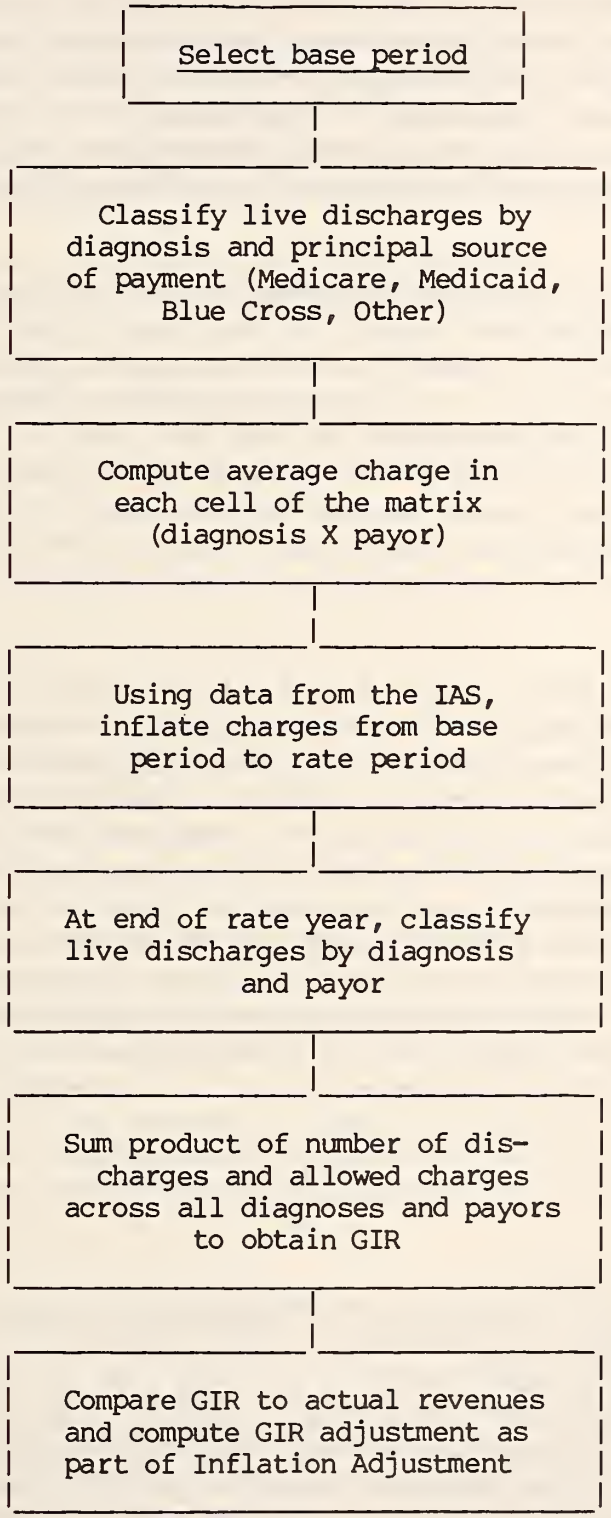
In the early years of rate setting, the Commission staff recognized that the system of setting rates per unit of service created incentives for hospitals to increase volumes. Blue Cross data revealed that its payments per day were increasing sixteen percent, and concluded that hospitals must be overcharging. Analysis of the data revealed, however, that intensity was increasing rapidly, greatly lessening the impact of rate controls on total expenditures for hospital services. The HSCRC staff became convinced--and remain convinced--that control of service volumes, rather than of unit costs, represents the real key to hospital cost containment.

The staff thus set out to design a system to put a lid on volumes, hoping to provide enough incentives to actually lower them. The resulting system, which is still being formalized, became known as the Guaranteed Inpatient Revenue (GIR) system and adds another dimension to the Inflation Adjustment System. The GIR system was first implemented in 1976 and is now in place in a sample of sixteen Maryland hospitals, including all hospitals with more than 400 beds.

The idea behind the GIR is to establish a "guaranteed payment" for each case treated by the hospital. This amount is based on each hospital's own charge and utilization levels in a selected base year; there is currently no statewide standard. Once the base year amount is computed for each case type, the hospital will be allowed increases only for inflation and a small allowance for "growth and technology" in subsequent years. If the same intensity levels are maintained, the hospital should break even at the end of the year; if intensity decreases, the hospital will receive the variable cost proportion (about half) of the revenue decrease; if intensity increases, the hospital must absorb the additional cost. These GIR adjustments are made as additions to, or deductions from, the next year's rates in a manner similar to all others made as part of the IAS.

Figure 6 outlines the GIR system. For a selected base year, data on live discharges from the hosital's records are classified by diagnosis and payor (i.e., Medicare, Medicaid, Blue Cross, and other). Payor

FIGURE 6: Summary of GIR System


Select base period
Classify live discharges by diagnosis and principal source of payment (Medicare, Medicaid, Blue Cross, Other)
Compute average charge in each cell of the matrix (diagnosis X payor)
Using data from the IAS, inflate charges from base period to rate period
At end of rate year, classify live discharges by diagnosis and payor
Sum product of number of discharges and allowed charges across all diagnoses and payors to obtain GIR
Compare GIR to actual revenues and compute GIR adjustment as part of Inflation Adjustment

classification is employed as a rough surrogate for patient socioeconomic status. Diagnosis is measured, depending on the hospital, using ICDA-8, H-ICDA, or DRGs, as defined in New Jersey.[1] "Resource standards" for each hospital are defined by computing the average charge for each diagnosis for each payor group and inflating that charge from the base to the rate year by the inflation rates developed in the IAS (plus an additional one percent for growth and technology). Hospitals are then "guaranteed" that amount for every case of that type treated during the rate period. During the rate year, the hospital continues to charge HSCRC-approved rates as before.

At the end of the rate year, the numbers of live discharges in each diagnostic category for each of the four payor groups, multiplied by the resource standard, are summed across all possible combinations. That sum becomes the GIR, and it is compared to the amount the hospital actually received by charging approved rates to that same group of patients. If actual revenue is less than the GIR, the hospital is given the variable cost proportion of that amount in next year's rates.[2] If actual revenue is greater than the GIR, the hospital must pay back the difference the following year, when the GIR adjustment is made as part of the Inflation Adjustment System.

At the present time, sixteen hospitals are on the GIR system and three more are scheduled to be added during 1979. Initially, a diverse sample of hospitals was selected for experimental purposes; later, the Commission put all large hospitals (with more than 400 beds) on the new system. GIR hospitals were chosen by the Commission and asked to participate beginning with the effective date of their next inflation adjustment. Cooperation was apparently good, although most likely, the hospital's alternative was to show cause in a public hearing as to why it should not be subject to the system. No further expansion of the GIR system is currently planned. The Commission believes that use of the complicated GIR methodology in smaller hospitals (where the problems may not be as acute) would probably not be cost-effective.

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[1]Abt Associates Inc., "A Case Study of Prospective Reimbursement in New Jersey," November 1979.

[2]The underlying philosophy is that if the hospital had <u>increased</u> volumes by this amount, it would have received the variable cost proportion of that increase as part of the volume variance adjustment. Since the fixed cost proportion of any volume decreases experienced by GIR hospitals will be allowed as part of the volume variance adjustment, this extra amount given the hospital serves as an incentive payment.

Rate Setting for New Programs

When a hospital wishes to institute a new program, it must submit an application to the Commission for approval of a rate. In the application, the hospital includes whatever substantiating material it deems appropriate. The staff analyzes the rate application and develops a recommendation for the Commission. At the next monthly meeting, the Commission discusses the application. The Commission has a variety of options at this point, among which are to:

- accept the application as submitted by the hospital,
- accept the staff recommendation,
- return the application to the hospital for modification, or
- direct the staff to study the application further.

Proceedings for a new rate application are in sharp contrast to the formula-based inflation and GIR adjustments. All aspects of the application are subject to challenge or negotiation. One general principle that the Commission has established is that a rate application must be consistent with the associated planning application. For instance, if the planning application includes a projected rate based on seventy percent occupancy, the Commission will not approve a rate based on forty percent occupancy. In one case that we observed, the staff challenged a rate application for a small, new intensive care unit on a number of grounds, including: higher nursing and physician coverage cost than indicated in the planning application, excessive nursing staff (32 RN hours per patient day in the ICU), and endowment support promised in the planning application but not reflected in the rate application. The Commission adopted the staff's recommendation for a lower rate than that proposed by the hospital. The staff had also recommended that the hospital consider not opening the unit because it was not financially viable.

Rate applications for new programs are evaluated on a case-by-case basis. If the program requires planning approval, the planning application and the rate application are compared for consistency. Where possible, interhospital comparisons are made to determine whether the proposed rate is "reasonable" in the light of past Commission actions. Both the application and the staff recommendation are generally quite detailed, and discussion at public meetings is wide ranging. Review of new programs has been a

key element of the Maryland system, however. One observer estimated that more money had been cut by disallowing new programs than by screening hospital budgets during rate review.

Scope and Nature of Negotiations

The negotiating process in the Maryland system has changed substantially from the time of the system's inception to the present. For ease of exposition, this discussion is divided into two parts: the negotiating process in the initial round of rate reviews, and the negotiating process in more recent times. Nevertheless, it should be remembered that the changes that occurred have been of an evolutionary nature and not as abrupt as this organization may imply.

1. Negotiating Process in Early Years

During the years 1974-77, the first round of full rate reviews was taking place. The legislation allows for the initiation of rate review either by the hospital or by the Commission. The first four Commission-initiated reviews were for hospitals that were chosen to illustrate specific issues; the Commission and the staff wanted to demonstrate their concerns about hospital management, house staff, accumulation of profits, and high costs. Many of the early rate reviews included public hearings, where hospital representatives were permitted to state their cases and were subject to examination by Commission members and staff. In the initial rate reviews, departmental costs above the 80th percentile for comparable hospitals were subject to challenge. Representatives of the press, the Maryland Hospital Association, and Blue Cross, as well as other interested parties, attended the hearings. Thus, the rate review process allowed for considerable public debate over hospital financial issues.

Hospitals that had not yet been reviewed were given periodic percentage adjustments to their rates. They also had the right to request a full rate review, a specific rate for a new or existing service, or an alternative method of rate determination. Table 7 presents the volume of proceedings handled by the Commission. In 1975 and 1976, there was a heavy volume of rate applications, which seems to indicate that hospitals not comfortable with the temporary increases preceding full rate reviews exercised their right to petition the Commission for different rates. Many of these applications were for exemptions from general principles, such as the prohibition of cross-subsidization, established by the Commission.

As time went by, the order in which hospitals were called in for review by the Commission became more and more random. As a result of the growing body of Commission decisions, legislative amendments, and legal decisions, the authority of the Commission was clarified.

TABLE 7: Cases Settled by HSCRC, Fiscal 1975-1978, By Type of Proceeding

	Petition for Alternative Method of Rate Determination	Temporary Rate Application	Permanent Rate Application	Commission-Initiated Rate Review
Fiscal 1975	3	19	6	3
Fiscal 1976	1	13	27	4
Fiscal 1977	1	10	13	28
Fiscal 1978	—	—	30	5

Source: Maryland Health Services Cost Review Commission, Report to the Governor, Annual, 1975-1978.

2. The Negotiating Process in Later Years

The original plan was to process rate reviews about once a year. However, when the first hospital to be reviewed returned the next year with another rate application, the staff decided to devise a method to allow the hospital an annual increase in rates without a full rate review. The hospital agreed to the methodology, which allowed it to keep some of the "profits" generated by efficiency improvements; the inflation adjustment became an integral part of the system.

The institutionalization of the inflation adjustment system, and later, the Guaranteed Inpatient Revenue (GIR) system, has tended to narrow the scope of negotiations. All of the hospitals, having been through rate review at least once, are familiar with the Commission's general guiding principles. There are fewer public hearings with correspondingly more automatic or negotiated adjustments. Most of the rate applications submitted are for new services. Finally, the low turnover of top staff of the Commission means that the hospitals are familiar with the individuals involved in rate setting.

Nevertheless, some uncertainties have persisted for the hospitals. The inflation adjustment and GIR systems were both implemented with "back of the envelope" procedures; the hospitals did not have thorough documentation of the process by which their rates were being set. The inflation adjustment system was documented by the Maryland Hospital Association's task force on inflation adjustment. The GIR system is in the process of being documented.

While they are now fewer in number, public hearings are still used by the Commission to pursue controversial issues. During one hearing, a hospital contended that it deserved higher rates because it provided higher quality care than did other hospitals. The Commission staff responded with an analysis which showed that the hospital's death rates, adjusted for case mix, were substantially higher than death rates in similar institutions. The hospital protested the staff's computation method, and the staff revised its figures somewhat. Still, the hospital's revised death rates remained higher than average, and considerable public attention was focused on the hospital. The rate controversy was settled by negotiation, and the hearings were concluded quickly.

Opinions differ as to the efficacy of the public hearing process. There is a general consensus among the Commission staff that the threat of a public hearing makes the hospitals considerably more willing to accept the staff's recommendations. Hospitals that do not accept the inflation adjustment system may submit a regular rate application, but the Commission may order a public hearing in which all aspects of the hospital's management

are open to examination. The MHA representative interviewed said that the public hearing is a safeguard for the hospitals. If hospitals are unhappy with the system, they have a public forum for their arguments.

The broad mandate of the Commission to concern itself with the financial stability of hospitals means that the Commission and its staff involve themselves in management decisions. Frequently, a hospital will ask the Commission for assistance. The Commission does not hesitate to recommend layoffs, merging of patient services, or hospital closings if it believes they are necessary. Of course, the principal staff members spend a substantial portion of their time helping hospitals deal with the rate-setting system.

Data Requirements and Analysis

On the basis of its legislated authority, the Commission has required hospitals to submit a wide variety of data, ranging from balance sheets to case-mix data. For purposes of developing a rate review methodology, the Commission in 1972 asked hospitals to submit balance sheets, income and expense statements, and Medicare cost reimbursement schedules. In addition, the Commission requested ten years of historical data on the following items:

- inpatient days;
- cost per inpatient day;
- outpatient visits;
- cost per outpatient visit;
- occupancy rate;
- length of stay;
- room rates by accommodation;
- total operating expenses; and
- bottom line profits or losses.

The Uniform Accounting and Reporting System was promulgated on April 1, 1973. The Commission staff prepared analyses, using reports from individual hospitals, which included comparative costs of overhead

functions, cost of hospital-based physician services, and costs of current assets. Early on, there was widespread misunderstanding of the data requirements and failure to comply with the Uniform Accounting System. Commission staff spent considerable time with hospital management in clarifying requirements. Computer data files were used to generate printouts of hospitals' unit costs and rankings by department, which were used in developing rate review methodology.

As the rate-setting system was established, annual and quarterly reporting requirements were instituted. The annual reports consist of summary statistics for the year, direct and overhead costs, capital expenditures, and an audited financial statement. The quarterly reports consist of monthly revenue, capacity, and volume data by service center. Quarterly financial statements are required to monitor the hospitals' solvency. There is also a compliance summary, which compares the actual rate charged in each revenue center with the Commission-approved rate. Variances of more than two percent from approved rates must be accompanied by proposals for their correction.

In its annual reports to the Governor, the Commission summarizes the following statistics for each hospital, based on the reports:

- percentage of occupancy utilized,
- total operating costs,
- equivalent inpatient days (EIPDs),
- average cost per EIPD,
- operating profit or loss,
- other income or expense, and
- net profit or loss.

From the early days of the Commission, some data have been computerized. Nevertheless, full computerization of quarterly and annual reports occurred only from July 1977 on. At the present time, reports are generated periodically on such variables as length of stay and intensity of service. These reports and analyses have several uses, among which are:

- identifying issues for future rate reviews,
- comparing rates on new service applications, and
- public dissemination.

The MHA has expressed an interest in further improvement of the data base, and the 1978 reporting forms are in keypunch format to facilitate computerization.

Auditing and Compliance

While the Commission has the authority to perform audits of hospital records, this authority has not been exercised with great thoroughness. Initial reports by the hospitals were not audited. Blue Cross did some auditing to determine the appropriateness of its own rates before the first rate reviews. In June 1975, a full-time staff position to organize the auditing function was created. It was anticipated that actual audits would be performed by outside contractors; even during rate review, there was no formal auditing by the Commission staff, although the general ledgers of some hospitals were examined and reconciled during rate review.

Quarterly compliance summaries are spot checked as submitted by the Assistant Chief for Audit and Compliance. After July 1977, enforcement of reporting requirements stiffened, and reports were rejected for incorrect formats. At present, a few hospitals are called each round because of obvious errors. The Commission has established a $100 per day fine for late reports, but in practice this sanction is not applied. The only serious breach of compliance occurred in the case of a new hospital and received considerable attention in the press; public pressure appears to be a more common sanction than fines.

Blue Cross representatives have expressed concern over the Commission's lack of funds for auditing. In late 1977 and early 1978, Blue Cross funded a pilot auditing program. Two national accounting firms that audit hospital financial statements were hired to perform special audit procedures on the annual submissions to the Commission. Results of the special audit were uneven. There seems to be a feeling among both Commission staff and Blue Cross officials that the program is not the final solution to the auditing problem; the Commission must still determine a reliable method of verifying the accuracy of data submitted to it.

Appeals and Litigation

Appeals

A formal appeals process has been established for the rate review system. The Inflation Adjustment System is "extralegal," and rate increases allowed under it cannot be formally appealed. If a hospital elects to apply for a rate increase under the IAS, the Commission staff will compute the adjustment and issue the new rates under an Order Nisi. The Commission has approved the application of the IAS methodology by the

staff, and individual IAS adjustments need not receive Commission approval. The new rates are issued to the hospital and to the designated interested parties; all have fifteen days to protest any aspect of the adjustment. If there is no protest during that time, the order stands.

If hospitals are dissatisfied with the outcome of the IAS, or if they choose not to use it, they may file a regular rate application, and the full appeals route is then available to them. In order to have their rates amended, hospitals must file an application with the HSCRC. The data contained in the application must be based on the quarterly reports filed with the Commission. Once the application is filed, the HSCRC has 65 days either to make a decision or to hold a public hearing. Whichever route is taken, the Commission has a total of 150 days to make a decision.

In practice, the rate application is reviewed by the Commission staff, and the analyst's recommendations are formulated. At this point, a meeting is arranged between the analyst, representatives of the hospital, and Blue Cross to discuss the analyst's position and to negotiate a solution. The application and recommended rates then go before the Commission at its next monthly meeting, and the Commission either votes its decision or calls a public hearing. If the negotiations have produced a solution that is satisfactory to both sides, the Commission will often affirm this resolution and no public hearing will be called. If, however, the two sides do not come to an agreement, or if the Commission disagrees with the negotiated solution, the Commission will call a public hearing.

Public hearings are subject to the Administrative Procedures Act. Notice of an administrative hearing is published in the Maryland Register in advance of the hearing date. Fifteen days prior to the hearing, the Commission staff files written testimony in support of its position; eight days prior to the hearing, the hospital files its written testimony in response. Blue Cross (or any other "designated interested party") may file written testimony at any time before the hearing is concluded.

Hearings are held before the Commission, which serves as judge and jury. One of the HSCRC attorneys is present to interpret the law and regulations should a question arise.[1] The first witness to be called is the rate analyst, who is cross-examined by the hospital's attorney. Next, the hospital's representatives (usually the administrator or chief financial officer) are called and cross-examined by the Commission staff. Finally, representatives from any of the interested parties (such as Blue Cross) can testify and be cross-examined by either side. Commissioners may question any of the witnesses at any time. The testimony tends to be technically oriented, bearing on the substantive issues in question.

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[1]This potential conflict of interest has never been formally challenged.

After the testimony has been completed, the Commission votes its decision. Once a decision is made, either the hospital or an interested party has thirty days to appeal the decision to the Maryland court system, beginning with the Circuit Court. The trial in Court is on the record and is based on a transcript of the Commission hearing. The Court must rule on whether the Commission was arbitrary and capricious in rendering its decision; this is the sole basis on which a Commission decision can be reversed.

No hospital has thus far actually taken a rate appeal to court. The only litigation involving the Commission has been over more general principles of rate review that arose during the review process (see the section on litigation that follows). However, public hearings frequently have been called and have been an extremely important vehicle in the Maryland system. Both hospitals and the Commission can call a public hearing should a dispute arise. Hospitals view this as a protection for them against excesses by the Commission; the Commission uses the hearings to highlight problems within the industry and thus to justify its stance against granting high rates. When a hearing is initiated by the hospital, the burden of proof rests with the hospital to justify its request; when the Commission initiates the hearing, as most frequently happens, the burden of proof rests with the Commission.

Any member of the public can attend the hearings (or any other meeting of the Commission). The press frequently attends, and depending on the issue, newspaper accounts of the proceedings may appear in Baltimore, Washington or other local Maryland newspapers. Some of these articles have received wide visibility and evoked considerable public reaction. The Commission staff take the hearings very seriously, since they are convinced that the hearings represent one of their most effective regulatory instruments. The public hearing, according to some observers, has become such an unpleasant experience for hospitals that even the possibility of a public hearing increases their willingness to negotiate.

Litigation

In the five years it has been setting hospital rates, the HSCRC has encountered relatively few court battles. One early case, which has been referred to elsewhere in the text, was significant in defining the scope of the Commission's authority. A second case, involving the HSCRC and Holy Cross Hospital, is still in process, and the eventual Court decision will have significant implications for Commission activities. Several other Court appeals, most of which were filed during the early years of rate regulation, were settled out of court, one at the judge's urging.

Franklin Square Hospital et al. v. HSCRC involved a petition filed by twenty hospitals in December 1974 to the Circuit Court for Baltimore County for a declaratory judgment concerning the HSCRC enabling act, regulations, and guidelines. Later, four additional hospitals, Blue Cross, Group Hospitalization, Inc. (GHI), and the Health Insurance Association of America also intervened. A declaratory judgment from the Court is requested when a controversy is anticipated; the petitioners ask the Court to give direction. At issue were two important questions: Who could say what rate structure was reasonable (i.e., the Commission or the hospitals)? And did Blue Cross (and other third-party payors) have standing as purchasers of health services?

The Circuit Court judge ruled in March 1975 that patients themselves--not third-party payors--were the only purchasers of health care.[1] He also ruled that "reasonable" rate structures proposed by hospitals had to be accepted by the Commission. (In particular, hospitals could not be forced to accept a CFA in lieu of depreciation.) The Court decision was appealed by the HSCRC, Blue Cross, and GHI.

The Court of Appeals reversed the lower court decision in 1976, ruling that the Commission is empowered to determine the most reasonable rate structure. Later, in May 1977, the Court of Appeals ruled specifically that the Commission could impose CFAs on a case-by-case basis. The very critical question of whether the Commission approves or sets rates was thus resolved in the Commission's favor.

Holy Cross Hospital v. HSCRC should resolve in 1979 the question of whether the Commission has the authority to, in effect, regulate the charges of certain hospital-based physicians, whether or not the physicians bill through the hospital's accounting system. The case arose out of the Commission's view that the incomes of radiologists, which were in excess of $400,000 per year in Holy Cross Hospital, were unreasonable. These incomes, the Commission argued, were the result of the monopoly positions held by these hospital-based specialists; patients entering the hospital have no choice of a physician when, for example, x-rays are taken. Therefore, regardless of how the physician bills for his services (i.e., whether independently or through the hospital), the costs of these services should be regulated as hospital costs by the HSCRC.

The rate order that set the physician and the hospital component of charges for the radiology, pathology, and cardiology performed within the hospital was appealed by Holy Cross to the Circuit Court for Montgomery

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[1]Blue Cross was subsequently required to pay HSCRC-approved rates by the Commissioner of Insurance.

County. The Court decided in favor of the Commission, and the decision was appealed. Further arguments were scheduled to be heard in early 1979, and a decision was expected midyear, but has not yet been reached. The HSCRC is confident it has a sound case and expects the lower court decision to be upheld. Both the Medical and Chirurgical Faculty of Maryland and the Maryland Radiological Society have petitioned for a declaratory judgment to determine whether the HSCRC has jurisdiction over the regulation of hospital-based physicians' rates.

In general, the HSCRC believes it has been supported by the court system. To date, none of its activities has been significantly curtailed by a court decision, and on balance, it would appear that the net effect of court rulings has been to strengthen HSCRC authority through clarification of the law in its favor.

5. Resources Required and Program Costs

Tables 8 and 9 present the funding history of the HSCRC. The history reflects a reluctance on the part of the HSCRC to request large increases in funding until its staff was well established.

One initial problem was uncertainty about the date on which the Commission would have rate authority. The 1973 General Assembly finally fixed the date at July 1, 1974 (as it was in the original legislation), but no money was provided for rate review activities. As a result, federal contract funds were sought and received in fiscal 1974.

In the early years of the Commission's operation, a large portion of the budget was devoted to contractual services (see Table 8), primarily the participation of Haskins and Sells in the development of the system. For fiscal 1975, the Commission requested and received authorization to transfer funding from contractual services to staff positions, which allowed the HSCRC to develop its own staff to perform rate reviews. The rate review workload proved heavier than expected, and auditing was cut back so that budgets would not be overspent. Fiscal 1976 was a difficult year because of a delay in obtaining a federal contract, which had been written into the budget. Although a staff auditing position was added, most actual auditing was still contracted out.

In later years, the Commission relied heavily on federal contract funds, particularly for developmental work. In fiscal 1977, a total of $256,829 ($100,411 federal share and $156,418 state share) was spent under the federal research contract for studies relating to state health laws, charity care, the development of the GIR system, and the fixed-variable cost ratio. Seven contract-funded staff positions were established in 1977 and continued into 1978.

TABLE 8: HSCRC Expenditures, by Fiscal Year and Category of Expenditure

Category	1973 Level	1973 Percentage of Total	1974 Level	1974 Percentage of Total	1975 Level	1975 Percentage of Total	1976 Level	1976 Percentage of Total	1977 Level	1977 Percentage of Total	1978 Level	1978 Percentage of Total
Salaries and wages	$ 60,016	33.3	$116,832	23.5	$169,488	40.2	$286,497	67.7	$395,465	72.1	$509,254	75.1
Technical and special fees	$ 41	*	$ 2,749	0.6	$ 19,223	4.6	$ 25,700	6.1	$ 29,789	5.4	$ 42,671	6.3
Communication	$ 1,144	.6	$ 2,000	0.4	$ 4,008	1.0	—	—	$ 1,880	0.3	$ 12,338	1.8
Travel	$ 3,171	1.7	$ 2,920	0.6	$ 5,141	1.2	$ 4,385	1.0	$ 7,590	1.4	$ 7,335	1.1
Vehicle operations and maintenance	—	—	$ 83	*	$ 1,888	0.4	$ 999	0.2	$ 1,281	0.2	$ 872	0.1
Contractual services	$106,971	59.4	$366,555	73.9	$209,651	49.7	$102,664	24.3	$ 93,072	17.0	$ 88,992	13.1
Supplies and materials	$ 707	.3	$ 2,926	0.6	$ 4,923	1.2	$ 1,879	0.4	$ 2,781	0.5	$ 3,003	0.4
Equipment replacement	—	—	—	—	—	—	$ 338	*	—	—	—	—
Equipment additional	$ 7,043	3.9	$ 1,474	0.3	$ 7,091	1.7	—	—	$ 11,463	2.1	—	—
Grants, subsidies and contributions	—	—	—	—	—	—	—	—	$ 4,845	0.9	$ 13,227	2.0
Fixed charges	$ 919	.5	$ 271	*	$ 222	*	$ 534	0.1	$ 7	*	$ 295	*
TOTAL	180,012	100.0	495,810	100.0	421,635	100.0	422,996	100.0	548,173	100.0	677,987	100.0
Number of authorized staff	7		9		19		29		29		29	

*Less than 0.1 percent

Source: Maryland HSCRC Report to the Governor, fiscal years 1973-1978

TABLE 9: Funding History of Maryland Health Services Cost Review Commission

Fiscal Year		Budget	Actual
1973	TOTAL	- N/A	$180,012
	State	- N/A	180,012
	Federal	- N/A	0
1974	TOTAL	- N/A	$495,810
	State	- N/A	326,446
	Federal	- N/A	169,364
1975	TOTAL	- $446,350	$421,635
	State	- 446,350	421,635
	Federal	- 0	0
1976	TOTAL	- $675,741	$422,996
	State	- N/A	N/A
	Federal	- N/A	N/A
1977[1]	TOTAL	- $510,385	$548,173
	State	- 415,185	404,721
	Federal	- 95,200	143,452
1978[2]	TOTAL	- $680,862	$677,987
	State	- 439,530	289,842
	Federal	- 241,332	388,145
1979	TOTAL	- $797,012	N/A
	State	- 559,982	N/A
	Federal	- 237,030	N/A

[1]Does not include $50,000 in funds from Blue Cross to expedite completion of full rate reviews for all hospitals.

[2]Does not include $50,000 in funds from Blue Cross for compliance auditing.

Source: Maryland HSCRC, Report to the Governor, Fiscal Years 1972-78, and unpublished budget data.

Because the Maryland system uses a dual methodology (rate review and inflation adjustment), it is very difficult to determine the level of effort per hospital in complying. The first few rate reviews were quite complicated and required extensive resources, largely because of the Commission's decision to make examples of these hospitals. By the end of 1975, only five hospitals had been through a full rate review. As the system developed and both staff and hospitals became more familiar with it, reviews required less time and effort, and the threat of public hearings was used to persuade hospitals to be more flexible in negotiations. In fiscal 1977, the staff was faced with a deadline by which all hospitals had to be reviewed in order to qualify for the Medicare waiver. In the space of one year, thirty hospitals received full rate reviews; one Commission staff member has estimated that an average of two weeks of staff time was required for these reviews.

It is anticipated that a full rate review cycle will not take place again in the near future. Instead, hospitals receive a formula-based inflation adjustment each year. To conserve resources, the applications for individual inflation adjustments are spread out over the year. The staff member who oversees the IAS estimates that a routine inflation adjustment requires two days of his time. Computer costs for a non-GIR inflation adjustment are minimal (about $2.50), but are higher for a GIR adjustment. Commission staff estimate that ten additional hospitals could be brought into the Maryland system at little or no additional cost.

Developmental Efforts

Developmental work has always been an integral part of the Maryland system. The inflation adjustment system, a method that gives hospitals an annual rate increase without full budget review, was developed to conserve staff time, and the guaranteed inpatient revenue system was developed in order to remove incentives to increase volume and intensity of services. Additional components of the system were developed to meet other specific needs.

Considerable research, much of it federally supported, is done in areas related to the system, and the Chief of Review Standards is heavily involved in the research effort. A federal contract currently supports seven staff positions, including an industrial engineer, an accountant, and a nurse. Among the projects recently completed or nearing completion are:

- Determination of the standard costs of treating patients with particular diagnoses

  A standard cost estimate will permit the Commission to establish reasonableness criteria for charges per admission as well as for length of stay.

- An experiment to determine feasibility of case-mix-based reimbursement

  This is an experiment with a charge structure based on patient profiles and diagnoses rather than charges for individual units of service provided.

- A study of state charity care policy

  The charity care study may lead to regulations requiring hospitals to inform the Commission of the amount of free care being provided.

- Analysis of the economic implications of state laws relating to health care provision

  Legal staff assigned to the Commission have identified state laws that are likely to have implications for health care provision. These laws are being analyzed to determine their economic impact.

- Analysis of the fixed/variable cost ratio

  Fixed/variable cost ratios for radiology, laboratory and daily patient care areas can be used to make precise volume adjustments. This will help to eliminate incentives to provide unnecessary services.

- Methodology for nursing home rate review

  The results of this study will allow the Commission to fulfill its responsibility for setting nursing home rates once all payors agree to pay Commission rates.

- Probability distribution of admissions by patient care center

  Information from this study will be used to determine appropriate bed requirements, to develop an excess capacity criterion for rate review, and to plan for future needs.

Several other projects related to the system's mechanics are now under way or being planned. Among them are a study of the payor differential, refinements to the diagnostic grouping system, revamping of the accounting manual, and a study of population-based rate setting.

The payor differential study was the result of an interest of Blue Cross, the Health Insurance Association of America, and the Maryland Hospital Association in determining what price differentials are justified by the business, payment, and subscription practices of various classes of payors, since the four percent differential approved for Blue Cross (and later for Medicare and Medicaid) was an arbitrary figure. The three groups agreed to fund a contract study to be supervised by Commission staff. The research design has been tested at one hospital and will soon be implemented in twenty more.

Refinements in the diagnostic grouping system are viewed as necessary in order to reduce the variation in cost within a diagnosis-related group (DRG). The staff will test whether the incorporation of additional variables such as age, secondary diagnosis, or socioeconomic status will improve the classification scheme.

Sections of the accounting manual will be rewritten for clarity. In addition, the manual will highlight the differences between the HSCRC accounting standards and the proposed System for Hospital Uniform Reporting (SHUR). Because many features of SHUR have already been adopted in Maryland, hospitals should find it fairly easy to adapt to the new system.

Commission staff hope to begin a study of population-based rate setting for isolated rural areas. This idea takes the GIR one step further: rather than a revenue constraint based on patient diagnoses, population-based rate setting establishes a revenue constraint based on age, density, and socioeconomic characteristics of the population to be served. It is not expected, however, that such a system can be implemented in Maryland in the near future.

The Maryland rate-setting system, then, is constantly developing original solutions to regulatory problems. Of particular note are the Commission's efforts to correct perverse incentives with specially designed features.

INTERACTIONS

In addition to the Health Services Cost Review Commission, there are other participants in the Maryland rate-setting process. While all payors are affected by the system, Blue Cross has been the most active participant;

Medicaid has taken a less active role. Others involved in some way are the Maryland Hospital Association, the Medical and Chirurgical Faculty of Maryland, the health planning process (both the SHPDA and the HSAs) and the hospital workers' union. The role each plays is described in this section.

Payor Groups

Blue Cross of Maryland

Blue Cross of Maryland has thirty-five percent of the market share of all payments from hospitals in the state. Its coverage includes all but five hospitals in the Washington, D.C. area, which have contracts with other insurors. Blue Cross is also the intermediary for Medicare payments, but takes great care to keep its Medicare activities separate from its own hospital insurance program.

Blue Cross has taken a very active interest in HSCRC policies from the very beginning, since, among all third-party payors, it has perhaps been the one most affected by the rate-setting program. In the years that led to HSCRC's founding, and during the early implementation period, Blue Cross was a vigorous opponent of the program for three major reasons:

- Blue Cross would lose much of its power to influence hospital rates on a regular basis;
- one of the major objectives of the rate-setting program was to ensure that hospitals would be reimbursed for bad debt and charity care in order to ensure their financial stability, and prior to HSCRC, Blue Cross did not reimburse for these costs; and
- HSCRC sought to reduce the price differential that Blue Cross enjoyed over other private payors from fourteen percent to four percent.

Blue Cross had been interested in developing some kind of prospective payment scheme since the mid-1960s; Blue Cross had always shown concern over the inflationary aspects of cost-plus reimbursement and had begun to work with hospitals to initiate a prospective budget negotiation system. However, this plan was opposed by the state Department of Insurance on the grounds that it might have been perceived by the public as a rationale for Blue Cross to obtain another rate increase. Once it became apparent to the hospitals that they would be unable to work out a separate program with Blue Cross, they began to favor the concept of an independent commission.

The hospitals sought an alternative to the process of neogtiating with Blue Cross for rate increases in order to avoid the public furor and political dealing that invariably accompanied each rate negotiation.

Since 1970, when the Maryland Hospital Association reorganized and assumed an arm's-length relationship to Blue Cross, the two organizations have taken divergent paths, especially with regard to HSCRC affairs. At the time the first bills to establish a rate-setting commission were introduced, Blue Cross felt that the hospitals had made a judgmental error in assuming that regulation was inevitable. This stance left Blue Cross in a seemingly reactionary role, which precluded their participation in the early drafting of the principles of the rate-setting program. Blue Cross realized that the hospitals were unhappy with the existing rate determination methods:

> [It was] regulation in its most primitive form. Hospitals. . . were a regulated industry. Third parties had been doing the regulating for years through rules and regulations, application of the reimbursement formulae, and through a general authority that permitted them to proclaim 'We will pay for what we will pay for.'[1]

Given this industry stance, Blue Cross lobbied long and hard against the rate-setting legislation. While Blue Cross was not involved in framing the law, it was able to influence the amendment of several provisions. Represented by a state senator who was a Blue Cross board member, Blue Cross sought to alter the wording of the bill that would have prevented HSCRC from evenly distributing the cost of bad debts and charity care among all payors.

A number of negotiating sessions were held between the bill's sponsors, MHA, Blue Cross, and the lieutenant governor. After those meetings, Blue Cross's public posture was that it would no longer actively lobby against the bill, nor would it support the bill. Blue Cross's proposed amendments to drastically alter the bill were withdrawn, which eliminated the threat of a floor fight in the legislature.

Even after the law was passed, until 1975, Blue Cross attempted to circumvent the authority granted the rate-setting program. The last major resistance was Blue Cross's attempt to be exempted from coverage under the provisions of the law. Blue Cross undertook a statewide public relations campaign (i.e., convening "town meetings" to raise the issues) and conducted a heavy lobbying effort in the state legislature. However, espite a heated battle, it remained unsuccessful.

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[1]Dick Davidson, President, Maryland Hospital Association, Hospital Progress, September 1972.

In recent years, Blue Cross has taken on the role of a watchdog by maintaining a counterbalancing interest to hospital influence over the Commission. There are a number of devices that Blue Cross uses to exert influence over the rate-setting process:

1. Blue Cross maintains a separate staff whose sole function is to monitor and provide input into HSCRC activities. The staff is made up of seven accountants, who have extensive hospital administration and public accounting experience. The staff receive all communications and documents from HSCRC and review and comment on all notices.

2. Blue Cross monitors every change in the rate-setting methodology and has constant informal contact with HSCRC over application of the techniques.

3. Blue Cross attends all rate determination meetings and negotiations between HSCRC and individual hospitals. Blue Cross analyzes any requests for rate approvals and provides opinions to the Commission.

4. If a public hearing is necessary, Blue Cross participates in the cross-examination and provides evidence based on its own analysis. Blue Cross, as a designated interested party, has exercised its prerogative to call public hearings.

5. Blue Cross retains legal counsel to consult on HSCRC matters.

HSCRC has affected Blue Cross's influence over hospital payments in a number of ways, but its impact on Blue Cross's financial position is unclear, due to the following:

1. Blue Cross still determines the benefit package and subscription rates and signs contracts with providers. However, the elimination of Blue Cross's payment formula has removed the intimate, informal relations that existed under the climate of negotiation.

2. Blue Cross has suffered financially from having to pay for bad debts and charity, but it feels that the Commission has managed to control costs, so it is difficult to separate gains and losses to Blue Cross.

3. The change in the price differential which favors Blue Cross over other private payors has not apparently damaged its market share over time.

4. Blue Cross has been forced to redefine its role from an organization which set reimbursement policy to one which now serves more as a consumer advocate which shares the 'public interest' of seeking the lowest possible rates from hospitals. It has questioned HSCRC's application of the rate setting methodology and pointed out a number of problems in implementation. Examples include:

- discovering improper interpretation of a rule in a rate application which eliminated substantial costs from a rate approval;

- identifying inconsistencies in reporting of costs;

- suggesting modifications of GIR and inflation adjustment techniques;

- providing funds for improving audit capabilities.

Blue Cross has gradually come to accept the existence and scope of power of the HSCRC and has been satisfied with the ability of the Commission to control costs and to avoid capture by the hospital industry. Blue Cross believes that the Commission is causing some hospitals to feel a real financial bind which will force them to assume less of a cooperative stance. Blue Cross believes that the better managed hospitals are able to fare well under the HSCRC system, but even those facilities may be reaching towards litigation as the excess "fat" to be cut is reduced and "necessary" services are threatened.

Blue Cross is concerned with the Commission's deficiencies in the area of monitoring, data and auditing. It had insisted that the HSCRC perform independent audits of cost reports filed with the Commission; the HSCRC believed that the hospitals' own CPA firms would be adequate. Blue Cross then decided to provide HSCRC with $50,000 to perform sample audits in ten hospitals. When considerable variances between the hospitals' and the independent audits were found, the Commission was convinced that changes were necessary. Still, Blue Cross is uneasy about the lack of audit of case-mix data and GIR reports.

Medicaid Program

Maryland's Medical Assistance Program (MAP) is one of the oldest in the country. Eighty-five percent of the MAP is federally Medicaid-eligible with the remainder supported by the state. Total federal and

state reimbursement to providers was approximately $350 million in 1977, with hospital inpatient services accounting for forty-four percent and hospital outpatient services another ten percent. The MAP is administered by a division of the Department of Health and Mental Hygiene.

MAP began its interaction with HSCRC on July 1, 1977 when Medicaid (and Medicare) began paying ninety-four percent of Commission-approved charges. (Prior to that time, Medicaid had set interim rates on the basis of reasonable costs.) Medicare cost reports would later be field audited by a contractor to MAP. Then a cost settlement would be reached, which was the lower of costs or charges, to set the new percentage rate. In the previously existing reimbursement structure, Medicare and Medicaid paid for cost elements very similar to those of Blue Cross. The notable exceptions were that Blue Cross paid charges rather than costs for outpatient services, and it paid the average per diem cost plus ten percent for private room days. These differences contributed greatly to the financial distress of inner-city hospitals, which had greater bad debts and fewer private rooms. The similarity between the rate structures of Blue Cross and the MAP has led to congruence of interests, which remains to the present time.

When HSCRC became involved with the MAP rates, there was a question as to whether the Health Care Financing Administration would still support field verification audits since cost settlements were eliminated by the Commission's methodology. This was an important point, since both Blue Cross (as Medicare intermediary) and MAP believed there was a strong need for Medicare Cost Report audits. The field verifications were continued, but a number of other issues have arisen since that time. These are:

1. Although the MAP is a designated interested party to all HSCRC questions and receives all formal notices, the program does not have sufficient personnel to monitor HSCRC activities. A single person has been designated to act as liaison with HSCRC. As a result, the MAP relies heavily on the Blue Cross staff to perform analyses and study HSCRC's methodologies.

2. Because of the lack of staff, MAP is unable to respond to HSCRC's requests for technical assistance. As an example, MAP was unable to provide HSCRC with data on the number of inpatient Medicaid days when a request was recently made.

3. MAP has not made any extensive effort to evaluate HSCRC's impact on Medicaid costs. Part of this is due to a lack of comparability in the reporting methodologies. For example, there are several key

differences in the statistical units used (MAP uses inpatient days whereas HSCRC uses inpatient day equivalents). The determination of when costs are incurred also differs (MAP uses payment dates, HSCRC uses date of service provided). MAP hopes to be able to correct these data organization problems when it implements its Medicaid Management Information System.

For the present time, MAP does not have many resources to study HSCRC-related issues. As an example, MAP is uncertain whether HSCRC's rates meet federal standards for Medicaid.

4. The MAP does not provide a great deal of substantive advice to or influence over HSCRC methodologies. Subjective impressions of some of the MAP staff were that there had been sustantial increases in payments during the program's first year under the HSCRC rate structure, and that this jump could be attributed to the inclusion of bad debts. However, MAP does believe that the Commission has curtailed growth in its overall spending.

Other Agencies and Organizations

Maryland Hospital Association (MHA)

The Maryland Hospital Association represents sixty-five member institutions, including all short-term general hospitals and four proprietary hospitals. The MHA is typical of other state hospital organizations in several respects. Its board members and officers are lay trustees of hospitals rather than administrators. This structure has existed since 1970, when MHA reorganized because a number of the progressive hospitals felt that the changing financial climate required input from trustees who would take a broader perspective rather than focusing on parochial, institutional concerns. The result is that MHA is structured to be a policy and planning organization that actively participates with both the legislature and the executive branch in the formation of health care policy. In fact, the MHA has a very small full-time professional staff (eight, not including the educational branch, which is under a separate corporation) and provides few management consulting, shared services, or other programs to member hospitals. MHA's philosophy is to fill in only what the market does not provide, such as malpractice insurance.

MHA was the major provider/sponsor of the HSCRC legislation as it was finally passed. Motivations for MHA support of a rate-setting program included the following.

1. The industry was concerned about the concerted public media pressure about rising costs of hospital care and the related charges of gross mismanagement of hospitals.

2. A number of legislative proposals had been introduced in 1971 that were considered totally unacceptable. While most of these bills did not stand a good chance of passage, they were sponsored by powerful legislators and set the tone for some kind of threatening legislation in the near future.

3. Hospitals felt that a voluntary cost review program run by the industry would no longer be publicly acceptable; some kind of external regulation was viewed as inevitable.

4. A ten-year financial trend analysis indicated that the existing cost-based retrospective reimbursement scheme was not providing adequate payment for capital and prevented recovery of certain operating costs. The larger inner-city hospitals were in an especially dangerous position, primarily due to the bad debt and charity care problem resulting from their patient mix.

To MHA, the primary rationale for supporting the founding of HSCRC was to ensure financial stability of its urban hospitals. Some suburban hospitals were reluctant to back up the MHA position, but most were willing to risk the regulatory presence in order to protect the industry as a whole. The public utility model had been suggested by some hospital officials who had experience with regulation in other sectors. The drafting of much of the text of the proposed bill was done by MHA legal counsel, which has remained active in implementation and legal follow-up. In general, the enabling legislation for HSCRC was very much in keeping with MHA's objectives and intent. As a result, MHA has not sought to alter the provisions of the law to any great extent.

There was, however, a major legal battle in which MHA coordinated a suit by twenty-four hospitals regarding interpretation of the law. MHA felt that the law gave HSCRC the authority only to approve rates, whereas the Commission felt that they retained the more comprehensive power to set rates. The suit was filed in January 1975 and went through a lengthy course of litigation before the Court ruled in favor of the Commission (see the section on litigation). In general, MHA has not been involved in litigation concerning the law itself or its implementation. As a matter of course, MHA does not involve itself in an individual hospital's challenge at any level of appeal.

MHA has been serious in its efforts to establish HSCRC as a legitimate, respected entity. In the early implementation period, some hospitals wanted MHA to require that all hospitals file a rate application on a regular basis and at the same point in time in order to overwhelm the HSCRC's staff. The resulting litigation would serve the dual purpose of defining the boundaries of rate-setting programs by the courts and also of delaying implementation. MHA did not support this strategy and chose to take the cooperative route of helping to develop administrative procedures.

MHA is actively tied into the policy making and program development of HSCRC in a number of ways:

1. During the development of guidelines and regulations, MHA's legal counsel met regularly with HSCRC staff to draft the language. One of MHA's standing committees is the Rate Council, which is solely responsible for HSCRC-related issues. The Rate Council spent a great deal of its time developing procedures that would be included in the promulgated rules.

2. MHA has worked with the Maryland Resource C[illegible]nter (an interagency data consortium) to provide data useful for HSCRC purposes. One of the data systems is discharge data abstracted from several sources and merged for a variety of users, including HSCRC. The accounting and financial reporting systems have been unsuccessful due to constant changes in information required for the annual filings. The major obstacle, from MHA's perspective, is that the statistical units (i.e., patient visits, service units) are not well defined.

3. MHA monitors did make recommendations concerning changes in methodology. MHA has convened several "task forces" made up of trustees and administrators, which deal with specific components of the rate-setting program, such as the guaranteed inpatient revenue and the inflation adjustment systems. These task forces work through the details of each methodology and keep track of potential changes. As an example, MHA is exploring the different approaches by which inpatient revenues may be categorized (i.e., patients less than age sixty-five versus those over sixty-five). Eventually, the aim will be to have a more elaborate classification scheme,

such as that developed by the Yale University research group. MHA has not yet formulated its policy on this issue, since there is a split among the membership. Some hospitals believe that only traditional cost accounting principles should be considered for the GIR, whereas others inclined to innovation and experimentation would like to include product outputs and quality factors.

In general, MHA's task forces have shown that there has been a definite time lag in the industry's achieving a complete understanding of HSCRC's rate-setting methods. At first, neither MHA nor any individual hospital was able to predict the impact that the inflation adjustment system would have on hospital reimbursement. As of December 1978, MHA feels that it is quite able to make that prediction, and that the majority of hospitals are also able to make an educated guess. However, no parties have yet felt they understand the GIR well enough to make such predictions.

MHA has definitely been a strong supporter of HSCRC, although that support has been far from unqualified. In general, it has viewed the outcomes as quite satisfactory. No hospitals have questioned the overall adequacy of the bottom line rates approved by the Commission, and the financial position of the urban hospitals has been stabilized by the changes in reimbursement. MHA also believes that the rate-setting program has improved the general management of member hospitals.

Planning and Certificate of Need

The Certificate of Need (CON) process in Maryland is one that involves review by both the HSA and the state agency. In general, the HSA is responsible for a great deal of the staff analysis that is used by both the HSA governing board and the state agency in approving or disapproving applications. The state CON program is a division of the SHPDA and has reviewed hospitals and nonprofit nursing home projects since 1970. There are three primary CON staff, who are responsible for need and feasibility analysis. The major decision makers are the director of the SHPDA and his deputy. However, there is an appeal mechanism involving a board of review, and major decisions may elicit considerable input from the Secretary of Health and Mental Hygiene.

Historically, there has been overt conflict between HSCRC and the SHPDA regarding the boundaries that define the rate-setting and the CON programs. The fundamental problem is that HSCRC feels the SHPDA and HSAs have not been stringent enough in their review and approval of projects, while the planning agencies have felt that HSCRC has overstepped its authority in extending its cost and financing analyses to nonfinancial aspects of need and feasibility.

The SHPDA believes that the HSCRC is concerned only with cost containment, and as a result, ignores issues of accessibility and availability of care. Also, the SHPDA disagrees with HSCRC tendencies to want to exclude from projects items that are not revenue producers, what HSCRC considers to be "frills" in hospitals. Examples include classrooms for teaching purposes, lobbies, auditoriums, space for administration, and various types of office space. HSCRC's objections frequently take the form of space footage requirements for these items. The SHPDA also is concerned about the results of HSCRC intransigence in negotiating with hospitals, which causes delays. In one case of a 100-bed expansion, which had very strong community support, HSCRC opposed the size of the project and negotiated for over six months to cut $4 million. Even then, HSCRC did not support the project. In the meantime, the planners granted a CON to the project, which was by now of smaller size, but which had nearly the same price tag because of the $2.6 million dollars' worth of inflation accumulated over time. From HSCRC's viewpoint, the planning agencies have not been able to resist political pressures in making project review decisions.

The HSCRC interacts with the CON program in several ways:

1. Once a CON application is filed with the SHPDA, a copy is immediately forwarded to both the HSA and HSCRC. HSCRC has assigned two staff members, whose part-time responsibility is to review CON applications. HSCRC has a format for these reviews that includes:

   - Facilities Analysis--study of hospital services in the applicant's immediate area, beds, occupancy, and admissions of the applicant, both current and projected, space footage/bed analysis, square footage/service analysis;

   - Construction-Related Costs--new construction costs/square foot;

   - Financing--funds required, fund sources, loan data;

   - Project's Prospective Operational and Fiscal Impact--forecasted impact on beds, patient days, FTE/bed, revenue and expense statement, balance sheet, and cash flow statement.

2. The HSCRC will make some kind of comment on most CON applications. The Executive Director of the HSCRC will often attend the facilities review committee

meeting of the HSA, and informal communications will be transmitted to the SHPDA in order to present the Commission's views.

3. HSCRC is often involved in major capital expenditure project review when tax-exempt bonding is sought because the bonding authority requires that applicants receive a "comfort order" from HSCRC. These comfort orders are essentially licenses assuring that the applicant will have sufficient financial reimbursement to pay a long-term debt. When HSCRC does not feel that a project is necessary, it will often refuse to grant a comfort order, and this power has been upheld by the courts. This has been one area of severe conflict between the SHPDA and the HSCRC, revolving around the scope of agency authority. In several cases, the SHPDA has approved projects, but HSCRC has withheld the comfort order, which is then used as a bargaining tool to obtain reductions in the size and cost of a project.

   One major area of conflict between the SHPDA and HSCRC concerns the extent to which HSCRC must concur with a CON decision in its rate approvals. The SHPDA has felt that HSCRC has overstepped its authority in using its powers to withhold comfort orders as an indirect Certificate of Need control. The HSCRC has, however, been reluctant to use this tool except for larger-scale projects it believes to be completely unjustified. The two agencies came to a head-to-head confrontation in one specific case; the result of the controversy was that both agencies have made slight concessions to each other's positions. HSCRC is now more cautious about directly challenging a CON decision by withholding the comfort order.

   However, this does not mean that HSCRC must routinely pass through all costs associated with an approved capital expenditure. In fact, this second-level tool currently is HSCRC's major weapon for controlling capital expenditures. Although the law states that the rates should reflect "reasonable costs" approved by the planning agencies,[1] HSCRC has taken a tough stance in allowing for these costs, especially in projects that it believes to be excessive. Several hospitals have

[1]The Attorney General's interpretation of the law is that HSCRC must consider" the costs approved by planning in its rate determinations, but the exact meaning of the word "consider" has remained ambiguous.

experienced considerable difficulty in obtaining rates to support their capital projects.

4. Once a CON has been granted, HSCRC will treat the planning application as a binding document for the determination of reimbursement rates. If there is a variance between the rate application and the figures cited in the original CON proposal, HSCRC will hold the hospital to the original CON amounts. To illustrate, one facility obtained a CON to upgrade some medical-surgical beds to intensive-care unit beds, and the CON application projected a per diem cost of $175 for the ICU beds. Both the SHPDA and HSCRC questioned this relatively low estimate and received the response that the real costs would be $326 per day, but the difference between the rate and the cost would be financed through the use of unrestricted donations. However, when the hospital filed its rate application, it requested a rate of $400 per day. The HSCRC objected and held the hospital to its originally specified rate of $175.

HSCRC has utilized a number of tactics to insert itself into the shaping of capital expenditure projects. In one case, HSCRC felt that a renovation and replacement project was overly expensive, so it generated a good deal of media attention to the excessiveness of the proposal. By raising a furor, HSCRC forced the hospital to negotiate and eliminate several million dollars.

In another case, a $20 million expansion and renovation was vigorously opposed by HSCRC. The Commission refused to grant a comfort order, but the hospital also did not relent. Unknown to HSCRC, the hospital attempted to obtain an FHA loan guarantee from a HUD office in another region. This federal source of funding would have eliminated the need for state public bonding and thus circumvented the requirement of a comfort order. When HSCRC discovered this maneuver, it went through many channels to stop the move (including writing a letter to the President), but the momentum of the project and its political ramifications helped the FHA loan to be granted. As the project is not yet complete, some observers believe that HSCRC will not be inclined to approve all of that hospital's rate requests generated by the project.

All of the interactions between the SHPDA and HSCRC have not resulted in conflict, and more recent cases have indicated that cooperation is improving. Both agencies have been unhappy with the overdevelopment and excessive construction of hospitals in Prince Georges County that resulted from weakness in the planning program in its early days. One of the hospitals in this area had questionable financial status--at one point, it

halted construction and gave up its financing--but still sought its annual recertification from the SHPDA and a comfort order from HSCRC. Although the hospital was successful in overturning the CON rejection through appeals, HSCRC was upheld in court for refusing to issue the comfort order.

Health Systems Agencies (HSAs)

There are five HSAs in Maryland, with the Central Maryland HSA (which includes greater Baltimore) by far the largest (with one-half of the project review volume in the state). HSAs are responsible for most of the analysis and staff work involved in a CON application, and the SHPDA is responsible for insuring that procedural aspects of the application are satisfied.

Relations between HSCRC and the HSAs have been limited to date. HSCRC has been interested in providing input to HSA project reviews, but there has been relatively little interaction. HSCRC staff do attend meetings of HSA Facilities Review Committees, especially when a major application is being processed. However, early input into the HSA staff review has not generally been obtained. HSAs feel that HSCRC should provide a more formal, detailed set of comments for the written analysis, rather than simply making an appearance before the review committee.

HSAs feel that HSCRC is very spotty and erratic in its decisions to provide advice to CON reviews and that this "pick and choose" philosophy is ultimately detrimental. To give one example, HSCRC was vehemently opposed to a $20 million renovation proposal and went before the HSA facilities review and executive committees to voice its opposition. However, the vocal opposition expressed by HSCRC was perceived as being untimely and disruptive, since the HSA had not had previous warning about the issues raised by HSCRC.

HSCRC has been especially concerned about the general ability of HSAs to turn down or significantly modify CON applications. HSCRC feels that, when it has attempted to provide substantial input into a CON review, the HSA has ignored the Commission's analysis. HSCRC believes that the political coalitions that constitute HSA boards make it difficult for the agencies to turn down any major project application. As a result, HSCRC feels it is put in the role of a de facto planning agency, and it uses its power both to issue comfort orders and to approve rates in order to influence capital expenditure decisions by hospitals.

Currently, more serious efforts to improve communication between HSAs and HSCRC are being made. The Executive Director of HSCRC is a member of Central Maryland HSA Facility Advisory Group, which will develop standards and criteria for project review. Changes in the staffing of that HSA have also led to greater interest in improved coordination of HSCRC

input. HSCRC also makes comments on Health Systems Plans, again with particular attention to the Central Maryland HSA.

Union Interaction

Unionization is not an extensive phenomenon in Maryland. The largest union is Local 1199-E, the Health and Hospital Employees Union. This union represents 6,500 service, maintenance, and LPN staff in six Baltimore area hospitals. These hospitals were organized in 1969. Other unions have made slight inroads into Maryland hospitals; the Retail Clerks Union has organized some RNs, and the Teamsters have organized some service/maintenance labor.

Unions do monitor the HSCRC activities in order to determine the types of cost ceilings that are set for personnel. A staff member of 1199-E has been assigned to observe Commission decisions, but the union does not closely study individual methodologies or procedures developed by HSCRC.

The major area of contention that the unions have with HSCRC is that the Commission's cost ceilings (and similar ones such as President Carter's voluntary seven percent price limit) provide hospital administrators with an overly strong negotiating tool at the bargaining table. In setting an allowable inflation rate for salaries, HSCRC does not account for impacts across levels and types of professions. As a result, the lower prestige workers suffer because, although the average wage increase may be seven percent, the hospital may choose to distribute that hike unevenly. Another issue is that the HSCRC may set the ceilings, but hospitals may choose to negotiate with unions for pay hikes much lower than the ceilings. The unions feel that if HSCRC sets a ceiling that can be used as a negotiating tool, then hospitals should be expected to come close to what has been deemed by the regulators to be a "reasonable figure."

While the unions believe that HSCRC has forced poorly run hospitals to come up to a minimum standard, in general, the Commission is overly supportive of the industry to the detriment of labor. The impact that this has had on contract negotiations was evidenced in the most recent biannual negotiation between 1199-E and its hospitals. The hospitals, which negotiate individually but which have fairly good coordination in bargaining, attempted to challenge the union's national benefit fund by risking a strike. The hospitals objected to the fact that HSCRC had originally planned a 7.82 percent ceiling on wages and then lowered it to seven percent in the face of federal wage-price guidelines. The unions felt that public pressure did not allow for much movement away from the guidelines and felt severely constrained. Wage settlements (7 to 7.5 percent) were reached at a later date, and a strike was averted.

Legislature

The Maryland legislature was active in the early implementation of the HSCRC enabling legislation. Key legislators who had participated in the shaping of the law were also active in developing the first set of regulations that governed the processes of the Commission and set basic compliance requirements for hospitals.

Oversight of HSCRC by the legislature has been fairly unobtrusive because HSCRC has had strong support from its sponsors. Some of its legislative supporters are quite powerful. With the active cooperation from the Hospital Association, HSCRC has encountered few legislative problems. Other than Blue Cross's efforts to exempt itself from HSCRC's domain, there have been no attempts to alter the basic scope and authority of the Commission.

Medical Society

The Medical and Chirurgical Faculty of Maryland was not intimately involved with the passage of the enabling legislation for HSCRC. To date, the medical society's interaction with the HSCRC has been limited to issues concerning the reimbursement of hospital-based physicians (i.e., anesthesiologists, pathologists, radiologists). The single most important case dealt with the question of whether or not the services of these hospital-based physicians should be considered to be basic hospital services (see the section on litigation). The medical society has taken the position that, if physicians' payments are processed by the hospital's accounting system, HSCRC has jurisdiction. If, however, physicians bill separately for services delivered in the hospital, their charges should remain outside the Commission's jurisdiction. In 1976, the medical society introduced legislation that specified this distinction between office-based and hospital-based doctors and produced dissension from the salaried physicians, who felt betrayed.

In general, the medical society has been quietly unsupportive of HSCRC activities. It has been unhappy with HSCRC's publicity-generating allegations about quality of care at certain hospitals, and it has requested a court injunction to prevent HSCRC from obtaining certain data. However, there is relatively little interaction between the medical society (which has allocated only part of a staff person's time to HSCRC liaison) and HSCRC.

PROGRAM RIGOR, INCENTIVES AND EQUITY

Rigor and Incentives

Outcomes of the Rate System

The approach to regulation taken by the HSCRC has essentially been to accept the base cost levels that existed in 1974 (with some budgetary disallowances at the margin), align costs and charges within patient service centers, and then concentrate on containing increases. Of course, the Commission believed that the inflation adjustment system would eventually result in reducing base cost inefficiencies. Since hospitals would be forced to live with much less than they had been accustomed to in the past, some aspects of their behavior would have to change. Regardless, the Commission believed it would be a significant accomplishment if hospitals could manage to live with yearly increases close to the CPI. As Harold Cohen has written, "If hospital costs had not been increasing so much faster than the CPI, no commissions would have been formed."[1]

The Commission interprets its mandate broadly, and sometimes concern for broader cost containment goals causes the HSCRC to sacrifice its narrower objective of containing rate increases. A recent illustration of this concerned the adjustment of the Emergency Room (ER) rate for a rural hospital. Until the hospital applied for an adjustment, the allowed rate had not included the physician charges, and the ER physicians billed the patient separately.[2] The hospital applied to the HSCRC for a rate increase to include the physician charge, so that patients would only be billed once for emergency visits. While this meant that the hospital's ER rate would increase substantially, the HSCRC concluded that, in total, patients using that hospital's Emergency Room would pay less per visit, so the new rate was approved.

Because of the unique, tripartite structure of the Maryland system, no amount of data on rate determinations can be very useful in assessing program performance. The most commonly used method of determining rates, the inflation adjustment system, involves the application of a formula that incorporates a standard inflation measure based on BLS price indices and retroactive and prospective adjustments based on standard formulas applied

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[1]Harold A. Cohen, "Experiences of a State Cost Control Commission," in M. Zubkoff, et al., eds., Hospital Cost Containment: Selected Notes for Future Policy (NY: Prodist, 1978).

[2]Currently, hospital-based physicians who bill separately are not under the Commission's jurisdiction.

to idiosyncratic hospital behavior. The final IAS factor, therefore, is such a composite number that neither absolute levels nor trends are particularly meaningful.

Since the Maryland system involves so little negotiation and is so geared to the uniform application of formulas, there has been little apparent change in the rigor of the program over time, at least in terms of rate approvals. The introduction of the GIR system, however, added a new dimension to the regulatory effort, reflecting a concern not just for unit costs but also for increases in volumes, and hence, total expenditures. The Commission staff believes that the GIR is working to contain volume and intensity levels, an assertion that seems to be borne out by available data.

Some evidence as to the efficacy of the overall system was provided by the HSCRC in its annual disclosure of hospital financial and statistical data for 1978. In that report, the Commision revealed that cost per equivalent inpatient day in Maryland increased 9.71 percent during 1977 as compared to 15.85 percent in the U.S. as a whole. A similar analysis for 1975-76 concluded that average per diem costs rose 11.78 percent in Maryland as compared to 14.8 percent nationwide. While there is not sufficient information available to assess the comparability of the two sets of data, nor enough of a time series to assess whether the lower rates in Maryland can be linked to rate setting, the data suggest that the program may be having some effect.

While there is evidence that costs per EIPA may have been contained under the program, data published by the Commission also indicate that Maryland hospitals in the aggregate are making money under the HSCRC system. While these trends are not uniform across all hospitals, net income for 48 acute care hospitals in Maryland nearly doubled from 1976 to 1977; total operating profits rose from -$500,000 to $5.7 million.

No significant change in the regulatory system that might account for these trends occurred during that period.[1] A plausible explanation for the improved financial position is that many hospitals have learned to prosper under the system by making cuts and increasing efficiency.

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[1]While Medicare and Medicaid began paying HSCRC rates in 1977, this should not have affected total revenues significantly. Prior to the entry of the two programs, cross-subsidization was built into the system, so that, while the distribution of revenues by payor would have changed when Medicare and Medicaid joined the system, total revenues would have remained essentially the same.

It is important, of course, to examine the distribution across hospitals of the $5.7 million in total profits. While eventually the second round of rate reviews will eliminate profits, the HSCRC is not concerned that hospitals are making money under the IAS. Eventually, these profits will be used to finance future projects, resulting in less need for borrowing, and hence, lower rates. The Commission has attempted to design a system that provides incentives to become more efficient--one that will benefit the public when it is "beaten" by the hospitals.

While the HSCRC has been confident of its ability to contain the increases in rates for hospital services, it has been concerned that the savings resulting from the containment of charges will be virtually eliminated by increasing volumes of services and expansion of the industry. The first of these concerns led to the development of the complicated volume variance adjustments in the IAS and to the development of the GIR. The second of these concerns has caused the HSCRC to be tough in setting rates for new hospital services and has put it at odds with the various planning agencies almost since its inception.

Reactions of Regulatees and Payor Groups

Hospital Industry. The Maryland Hospital Association was an active partner in both conceptualizing and negotiating the passage of the enabling legislation that created the HSCRC. The strong commitment of the MHA to the establishment of an independent rate-setting body greatly contributed to the shape that the Commission has taken.

While MHA sought and obtained an autonomous Commission that could make relatively impartial rate determinations for hospitals, it has been surprised by the wide scope with which HSCRC has defined its authority. MHA underestimated the level of technical competence that HSCRC has demonstrated; hospitals have been taken off guard by the elaborate methodologies that HSCRC has devised, though the industry has, by and large, found the Commission's use of these methods fair and reasonable. Still, the HSCRC has gone much further in its intervention than any part of the industry anticipated. To begin with, MHA did not believe that HSCRC should have the power to "set" the rates, but that it should only "approve" rates charged by hospitals. MHA made a concerted effort to weaken the formal scope of power of HSCRC via a court challenge in the Franklin Square case, but the hospitals eventually lost. This was the only direct industrywide challenge to the Commission and is likely to remain the only one for the foreseeable future.

The industry's focus so far has been on preventing HSCRC from taking on even greater powers than it currently exercises. Very recently, MHA attempted to alter the Comprehensive Health Planning Law, so that any formal mandate requiring HSCRC input into Certificate of Need decisions would be eliminated. The industry has been dissatisfied with HSCRC's intervention into capital expenditure decisions, since the Commission has been characteristically more stringent than the SHPDA in seeking cuts in the size of applications.

The program's ability to control hospital decision making for resource allocation has begun to cause concern among the financially stable suburban hospitals, which feel they have lost much of their freedom to make choices about hiring new employees, innovating to improve quality, and raising funds for growth. The industry believes that individual hospitals may begin to challenge HSCRC's rate decisions, as the hospitals feel they deserve more latitude in making spending choices.

In summary, the industry perceives HSCRC regulations to be very appropriate and rigorous in terms of technical design; the staff is considered to be capable and reasonable. The lack of routinized organizational processes and of documentation of methodology, however, has, in its view, weakened the implementation of the rate-setting process.

Blue Cross. In contrast to the Hospital Association, Blue Cross has been the major interest group that has attempted to weaken the legislative mandate of HSCRC. Blue Cross bitterly fought the enabling legislation. It attempted to insert amendments to the 1971 law that differed from those of HSCRC and that would have deleted the requirement to reimburse bad debts. When Blue Cross failed to effect substantial changes in the 1971 proposal, it continued to press and lobby for exemption. Until 1975, when its last legislative attempt to be excluded from HSCRC's jurisdiction failed, Blue Cross remained a major obstacle to program implementation.

However, Blue Cross's role has changed since it has come to accept its inclusion under HSCRC policies. Having decided that its own interests would be best served by ensuring that HSCRC be as tough as possible in dealing with hospitals, Blue Cross has since become a vocal and active "designated interested party" to all HSCRC activities. By monitoring all policy developments and changes in rate-setting methods, Blue Cross has attempted to prevent industry capture of HSCRC. Blue Cross staff also perform detailed analyses of individual rate applications, inflation adjustments, and GIR calculations in order to determine if mistakes have been made. Generally, Blue Cross has been suspicious of the hospitals' compliance with HSCRC intent and has attempted to convince the Commission that greater care must be taken in data collection and auditing of cost reports. By taking this counterbalancing position, Blue Cross has increased HSCRC's ability to monitor and analyze hospital claims.

Medical Society. The medical society was not a party to the passage of the legislation or to any of the major implementation decisions, nor has it made any specific efforts to alter the rate-setting program's authority other than to limit HSCRC coverage to include only physicians who are salaried by hospitals.

Unions. The hospital workers' unions were not at all involved in the development of the HSCRC. The unions are relatively weak political forces in the state and have not attempted to enter the legislative arena.

The unions also have not had much input into HSCRC policy making or even rate determinations for individual institutions. While the unions are unhappy with the unilateral fashion in which the HSCRC sets wage ceilings for hospitals, they have had little power to alter any HSCRC decision. The rigor with which the HSCRC applied the inflation system to hospital rates has definitely weakened the unions' bargaining position, as the recently concluded round of contract negotiations clearly demonstrated.

Structure of the Program

Organization. The independence of the Commission and its staff from the Department of Health and Mental Hygiene, which was solidified soon after the HSCRC began operations, has been an extremely important factor. The DHMH, which is traditionally administered by a physician, is considered to be a provider-oriented agency. Independence from that bias, as well as the removal of the extra layers of bureaucracy for carrying out its procedures, has significantly affected the Commission's power and flexibility. Unquestionably, the independence of the HSCRC has been a critical element of its success.

Similarly, the exemption of most of the staff (and all high-level staff) from state civil service requirements has also contributed significantly toward increasing the independence of the Commission. The Executive Director, with the approval of the Commission, can hire whomever he wants for any of the "unclassified" positions; he is not limited to hiring civil servants. This capability, which is rare in state government, facilitates the building of a team. The evidence indicates that great care has been taken to build such a team within the HSCRC staff.

The Commission itself acts as a significant force within the system. It has been chaired from the beginning by a hospital administrator, whose aggressive behavior in this role has both alarmed the industry and allayed the fears of those who were concerned about industry capture of the Commission. While the number of industry representatives on the Commission is

limited by law, actual membership has never approached that number. Backgrounds of the current commissioners are diverse; the more active commissioners (in addition to the chairman) include a lobbyist for a public utility and a health economist on the faculty at Johns Hopkins. The Commission has been extremely supportive of its staff, although it does not always approve staff recommendations.

When its authority to set rates began in 1974, the HSCRC immediately made plans to incorporate the two federal programs--Medicare and Medicaid--into the system. While delays postponed their entry until July 1977, the Commission was always aware that it could not carry out its legislated mandate--nor could it hope to be sufficiently effective--until all payors were brought into the system. As of July 1977, the HSCRC's ability to influence hospital behavior dramatically increased, since it was then given authority to control all rates paid by all payors to all hospitals in the system.

Input to Rate-Setting Program. The resources that have been put into the rate-setting program have, in many ways, shaped the system. The Commission has tried to keep its request for resources modest in order to avoid building up a massive bureaucracy. The lack of annual budget review, and particularly the lack of compliance auditing, are due in large part to resource constraints.

At present, the Commission has a full-time staff of twenty-two (excluding seven federally funded positions). Sixteen of these are professional staff. Two assistant attorneys general are permanently assigned to the Commission and are counted here as Commission staff, although they report to the attorney general. The top Commission staff members are assisted by four rate analysts. While some assignments of specific responsibility are made, several staff people may have input into the evaluation of a particular rate application or rate review.

The backgrounds of Commission staff are diverse. The Executive Director, an economist, has a background in utility regulation and in health economics. Both the Chief of Institutional Analysis and the Chief of Review Standards have doctorates in mathematics. Of the present Commission staff, these three have had the greatest role in developing the rate review methodology. Perhaps because of their backgrounds, their approach to methodology has been to determine the perverse incentives in an unregulated system and then to devise a system that provides incentives for cost containment. The approach deals in broad strokes rather than in careful documentation of detail, and it has been criticized on these grounds. Other Commission staff, including the Deputy Director and the three Assistant Chiefs, have backgrounds in accounting; this group handles much of the day-to-day interaction with the hospitals and does analysis for the rate reviews.

There are two distinct patterns of turnover at the Commission. Turnover has been a problem among lower-level staff, approaching forty percent per year at times. Turnover among key staff, however, has been almost nonexistent, and the Chairman of the Commission has served from the beginning. The low turnover in key positions has made for stability in the philosophy of rate setting and the individuals with whom the hospitals must deal, even though the mechanics of the system have changed considerably.

Data systems were not extremely well organized at first but are steadily improving. An effort to organize and computerize reports has resulted in reliable data files covering the period from mid-1977 to the present. Printouts on length of stay, intensity of service, and compliance are generated periodically to point up potential problems.

The rate-setting system as it exists today in Maryland is a low-cost one. The inflation adjustment system was designed as a method of avoiding annual budget reviews and reflects the staff's feeling that additional hospitals could be added to the system without straining resources. According to the Deputy Director, the Commission and staff look at the resources available and try to set realistic priorities, and there seems to be a feeling that a group that is regulating hospital charges should not be constantly asking for more resources of its own.

While the cost of the mature system appears to be quite low, there are some additional factors to consider before trying to estimate the cost of national implementation of the Maryland system:

- The costs of initial start-up were spread over a number of years in Maryland; states desiring a faster start-up could expect higher initial costs.

- In order to comply with Commission reporting requirements, many hospitals had to convert data from their own systems to fit the Commission's categories. (Eventually, uniform accounting will be required.) The costs of this conversion have to be considered as implementation costs.

- Auditing and compliance monitoring has suffered from lack of resources; Blue Cross has provided the Commission with $50,000 to perform compliance audits of ten hospitals. The costs of compliance auditing should be considered in evaluating total costs.

- Developmental costs are difficult to estimate. The start-up costs (fiscal 1973 and 1974 budgets in Maryland) would probably occur in any case. Because Maryland is a

pioneering system, heavy federal funding was available, particularly for development of the GIR system, but a state implementing the Maryland system would probably not have these development costs.

- The Maryland system makes use of outside resources other than the federal government. Most notably, Blue Cross has five full-time CPAs who interact with the Commission. While much of their time is spent protecting the interests of Blue Cross, they also provide a useful function in the monitoring of Commission activities; they have provided resources to improve the auditing function of the Commission and to speed up the review process. In addition, the MHA has provided resources for documentation of the IAS and for educating hospitals about the system.

Process of Rate Setting

Definition of the Rate Base. Allowable costs defined by the HSCRC, on which rates are based, consist of six categories of operating costs and other financial requirements. There are no variations by payor group in the composition of allowed costs. The HSCRC definition of cost is basically the same as the financial requirements for health care institutions defined by the American Hospital Association, with one significant modification: the Capital Facilities Allowance (CFA) has been substituted for conventional depreciation accounting.

The primary effect of the CFA is probably to redistribute funds rather than to save money on balance. The CFA limits the amount hospitals are allowed to accumulate for buildings, for example, to twenty percent of replacement cost for a facility of an appropriate size. Replacement costs per bed are determined by the HSCRC and do not vary across different communities; high-income and inner-city areas are allocated the same amounts. The size of the replacement facility is not necessarily the same as that of the existing hospital, since the target number of beds is worked out by the Commission, based on current average occupancy with an added "reasonable standby capacity." Thus, the hospital, in the final analysis, may be allowed to accumulate twenty percent of the replacement cost of a smaller, less plush facility. Hospitals must account for the amounts they have been allowed to accumulate for the building fund.

On the other hand, hospitals are allowed replacement cost depreciation for certain types of equipment, so that they will not need to borrow in order to replace it. Similarly, the general equipment allowance per occupied bed is, on average, more than Medicare allowed.

Use of a CFA, of course, constrains the amount hospitals are allowed for buildings and equipment. Although the HSCRC can allow the hospital additional cash above the CFA as an "other financial consideration," the Commission tends to be reluctant to pass through excessive capital costs; CON approvals are definitely not automatically passed through. Although the HSCRC has been involved at almost every level of the planning process and has tried to actively prevent or reduce the scope of numerous capital projects, its authority to approve rates as well as its ability to deny comfort orders has ultimately been used to jeopardize, if not prevent, particular projects the Commission believes are unnecessary or extravagant. New programs are closely scrutinized and often discouraged by the HSCRC. If a new service is not involved, operating costs of new projects must be covered under the amounts authorized by the inflation system; this generally means that, if a new project is to be added, cuts will have to be made elsewhere.

Reimbursement Mode. The Maryland system is now entirely charge based, with rates set per unit of service in each of the hospital's patient service centers. The system is entirely prospective, with all retrospective adjustments built into future rates. There are no incentives to overspend since revenues are entirely regulated, with allowed revenue increases largely determined by the inflation rate. Overcharging is monitored and penalized through deductions from future rates; more severe penalties for overcharging have recently been implemented.

Interhospital Comparisons. Since the emphasis of the Maryland system has shifted to containing cost increases, there has been minimal use of interhospital comparisons. During the rate review phase, formal screens were employed to evaluate unit costs in the individual patient and general service centers; all costs above the 80th percentile were automatically challenged and usually disallowed. The only groupings used were to distinguish Baltimore hospitals from others in the state and to separate teaching from nonteaching hospitals. The arbitrary 80th percentile standard was not particularly stringent, but this was in keeping with the Commission's regulatory philosophy, which essentially has been to focus on the most significant problems within the hospital industry.

Interhospital comparisons are, however, used more frequently as analytic tools when hospitals request higher rates or when they request a rate for a new service. The example was cited earlier of the HSCRC analysis, which compared case-mix-adjusted death rates in a large Baltimore hospital with those in other hospitals in the city, thus negating the hospital's rationale for higher rates. Unit costs for various services are often compared for all hospitals to help the HSCRC staff evaluate rate applications; the staff likes to be aware of the hospital's unit cost rank order within the state. Less expensive hospitals are likely to receive more favorable treatment from the Commission.

Volume/Intensity Adjustments. Increases in volumes of services were found to be the vulnerable spot of a rate system where charges are established for units of service. Several additions were made to the inflation adjustment system so that hospitals would not profit from increasing volumes (i.e., the volume variance adjustments) and would, in some cases, be rewarded for decreasing volumes (i.e., the GIR adjustment).

Volumes, like factor cost inflation, are never projected for the rate year. Some projections had been included in the system until recently; specifically, volumes were estimated for the quarter preceding the effective date of the rate adjustment (and for which actual data were not yet available). The complexity and magnitude of retrospective volume variances (comparing estimated and actual volumes retrospectively for that quarter) were such that all volume projections have been eliminated. Actual volumes for the current year (although with a three-month lag) are projected to continue into the rate year. Any discrepancies will lead to retroactive as well as prospective adjustments the following year.

In 1977, the Commission instituted an elaborate system for computing variable cost proportions that is designed not to reward hospitals that increase volume of ancillary services and/or length of stay. The variable cost proportions are calculated in a variety of ways (as shown in Table 6 in the section on the inflation adjustment system), depending on whether they are to be used retrospectively or prospectively and whether the hospital has experienced increases or decreases in equivalent inpatient admissions and total revenues. Since the IAS formula allows the hospital only the variable cost portion of volume increases and the fixed cost portion of volume decreases, the hospital will be allowed more in rates the higher the variable cost proportion.

Variable cost proportions are applied twice to volume changes. Retrospective adjustments add or subtract from rates the fixed cost proportion of volume decreases or increases, respectively, relative to amounts budgeted for the last rate year. Prospectively, allowed revenues for the next year are increased or decreased by the variable cost proportion of these volume increases or decreases, respectively. The allowed variable cost proportions provide incentives for hospitals to behave in ways desired by the Commission.

When admissions (i.e., EIPAs) increase, the hospital is expected to increase the volume of services (patient days and ancillary services) in total, leading to higher costs. On the other hand, when admissions decrease, hospitals are not rewarded when length of stay or intensity increases. The system of rewards and penalties is grounded in the computed variable cost factors. Variable cost percentages are usually lower for ancillary services than for routine services, since volumes for ancillary services are easier to manipulate. For both routine and ancillary services, however, the Commission believes the variable cost proportions are fairly stringent, so

that hospitals should not be profiting from increasing volumes. A study is currently under way to collect data on fixed and variable costs in hospitals, which will eventually lead to system refinements.

The GIR system provides for explicit rewards for decreasing intensity of services by allowing the hospital the variable cost proportion of any savings incurred from intensity reductions. Since the hospital is "guaranteed" a certain total amount per case, it benefits from reducing the resources used on each admission.

It is, of course, possible that any savings measured for the GIR system are artificial. The choice of a base period for which average charges are computed is critical, since the resource-use standard for each hospital is defined by patterns of utilization during that period. If during that base period the hospital had been unusually inefficient, for reasons that may not occur again, it will automatically be rewarded under the GIR system without necessarily altering its behavior in the desired ways. Also, the computed savings could be affected by large year-to-year differences in a few rare case types that reflect small sample variability rather than actual change in resource use. The Commission staff believes, however, that on balance this variability will cancel out across all the hospital's discharges.

Trend Factor. To calculate future provision for inflation under the IAS, hospitals are grouped into three groups according to geographic location: Baltimore, Washington, and the remainder of the state, and Baltimore, Washington, and U.S. average indices are used for the three groups, respectively. The inflation factor is thus primarily exogenous to the industry.[1] The Commission evidently believes that hospitals should peg wage increases to the overall cost of living, and that inflation in their nonlabor costs is adequately measured by the composite indices it has constructed. No studies have been done by the staff to compare actual factor cost inflation in Maryland hospitals to the indices used to measure it. Although the indices are for the most part exogenous, the weights used to form the overall inflation factor are endogenous, based on the individual hospital's costs. The inflation factor is thus appropriate for the individual hospital, given the composition of its costs.

Data Requirements. The enabling legislation authorizes extensive data collection by the HSCRC. As a result, the finances of Maryland hospitals are a matter of public record, as are utilization patterns, diagnostic information, and other data. Particularly in recent years, the Commission has computerized the data so that it is readily accessible for

[1]As has been noted earlier, the Commission is now analyzing wage and other survey data collected from hospitals in order to refine the index applied to rural hospitals.

use. The ready availability of comprehensive data describing the hospital industry, which is used to initiate change, justify Commission decisions, or develop new procedures, has been instrumental to the regulatory process.

Budget Reviews and Negotiations. The process of rate review and negotiation has changed substantially over the history of the Commission. In the first round of full rate reviews, the rate-setting process often involved a public hearing rather than behind-the-scenes negotiations. After the first round, the process involved more automatic adjustments and partial rate applications and fewer full-scale reviews.

During the first round of rate reviews, the Commission was trying to establish its authority. Points of contention were aired in wide-ranging public hearings, during which both the hospitals and the Commission could call witnesses. Hospital representatives and Commission staff presented data analyses to justify their arguments; designated interested parties also presented testimony.

Commission staff found the first round of rate reviews to be extremely wearying; subsequent adjustments have taken one of three forms: inflation adjustment, partial rate review, and full rate review. These procedures differ in the degree to which negotiation is involved, and often, in the degree to which the proceeding is an adversary one.

Inflation adjustments are done by formula, with comparatively little negotiation. Each hospital submits a request, and the data are fed into a computer program that determines the adjustment. When there is no departure from the formulary adjustment, the adjustment takes effect without specific Commission approval (the Commission is informed of the adjustments at its next regular meeting); any departures from the formula must be approved by the Commission.

Partial rate applications are a way for hospitals to get rate relief in unusual situations, such as the termination of outside funding to a special unit or a need for extra nursing staff to provide twenty-four-hour coverage, or to determine rates for new services. Resolution of these applications frequently involves negotiation. Rate analysts examine each application for reasonableness and perform an analysis based on projected costs, volume, and the level of the rate as compared with other hospitals' rates for the same service. During the course of the analysis, the rate analyst might ask the hospital to justify certain items, and negotiation might take place at that point. The rate analyst submits recommendations to the Commission at the regular meeting, along with the analysis. The Commission will discuss the application and frequently will accept the staff recommendation without change. Sometimes hospitals are asked to supply more information, or the application is returned to the staff for further study.

While a formal second round of rate reviews has not been done, full rate reviews are still performed at the request of hospitals or at the instigation of the Commission. These reviews appear to have fewer formal screens than reviews in the first round, and a public hearing may be requested either by the Commission or the hospital. The threat of a public hearing is viewed by Commission staff as a strong incentive for hospitals to negotiate, and the staff perceives that more and more disagreements are being settled by negotiation.

Appeals. Independence of the HSCRC from the processes of the Department of Health and Mental Hygiene meant that appeals of Commission decisions would be directed not to the DHMH Board of Review, but to the Maryland court system. Few hospitals have exercised their right to appeal rate decisions, and these few cases have been settled out of court. Most of the litigation involving the HSCRC has involved more general principles, mostly concerning rate-setting authority.

An additional appeals process of sorts exists in that hospitals dissatisfied with rate increases granted under the IAS can file a rate application and appeal to the Commission. This process, however, is costly in terms of time and effort, and it may or may not produce results favorable to the hospital. If a public hearing is called, the cost and unpleasantness for the hospitals increase substantially.

Because of the record of both the court system and the Commission, hospitals have tended not to appeal their rate decisions. The IAS has seemingly produced satisfactory results for most hospitals. Regular rate applications have been limited to new services or to proposed adjustments to take into account changes in hospitals' financial situations or market conditions. Appeals of rate orders to the courts have been virtually nonexistent.

Role of CON, Planning and HSAs

HSCRC has had a stormy but improving relationship with the planning community. The origin of the conflict has been the Commission's view that planning groups have not been able to turn down projects that are either unnecessary or excessive. HSCRC views the expansion of the industry as directly jeopardizing its objective to contain hospital costs in the state, and it has been an outspoken opponent of numerous planning decisions.

The HSCRC is not explicitly bound to include any or all costs approved by CON in rates. In addition, it may refuse to issue a comfort order to the bonding authority. While the Commission can thus ultimately influence the outcome of approved projects, it has been reluctant to do so, since it has been sensitive about overstepping its authority. Most of its activity has therefore been focused on influencing the planning process

itself. In selected cases, however, the Commission has refused to issue a comfort order, and in all cases, rates are based on cost or utilization projections that hospitals have provided in their CON applications.

Regulatory/Legislative Environment

The political environment for HSCRC has been quite favorable. The Commission was founded as one of the highest priorities of Governor Mandel's administration, and its activities were cited by the Governor as being among the major accomplishments of his administration. That administration saw HSCRC as an important tool for controlling health care costs and as a mechanism for representing consumer interests in health policy. As a result, when the enabling legislation was threatened by Blue Cross's intransigence, the Governor put the full weight of his office behind the bill and was able to secure passage without drastic changes to the basic provisions as drafted by MHA.

Maryland has been one of the pioneering states in the area of health care regulation. Its Certificate of Need program, adopted in 1968, was one of the first in the country. There are several legislators who have considerable interest and expertise in health care issues and who were very active in pushing the early proposals for a rate-setting program and in negotiating its final form with the MHA and Blue Cross. The hospital industry itself provided a warm climate for adoption and implementation of HSCRC. The industry included a number of influential hospital administrators and trustees who were familiar with public utility regulation. As a result, MHA provided much of the basic outline for HSCRC's structure, and in fact, MHA counsel drafted much of the bill. Finally, much of MHA's leadership believed that regulation via external review was an inevitability, and that the hospitals should participate in and support HSCRC avoid less acceptable forms of regulation.

Legislative oversight beyond the early promulgation of regulations has been minimal. There have been no legislative challenges to, or major problems with, the implementation of the Commission's activities. There have been no attempts to significantly alter the coverage of the law other than Blue Cross's unsuccessful effort to exempt itself. The budget of the Commission has never been attacked, probably because HSCRC has sought to keep its budget modest.

Summary

The system in Maryland is a combination of detailed formulas and subjective evaluations of "reasonableness" that are bolstered whenever possible by data analysis. The almost immediate move from the budget review approach incorporated in rate review to the formulistic IAS greatly reduced the discretionary elements in the system, as well as the amount of

negotiating between hospitals and the HSCRC. If hospitals elect the IAS, they must accept the outcome of an involved formula that is applied to hospitals uniformly with few discretionary components. If they elect rate review--either full or partial--they run the risk of facing a public hearing, during which almost any aspect of their operation may be open to public scrutiny. Hospitals' desire to avoid public hearings and the attendant publicity increases their willingness to negotiate.

Support of the HSCRC by the governor, the legislature, the court system, and the industry itself has served to quiet those who sought to limit Commission authority and to create an environment in which the Commission could establish itself as a strong and independent body. That environment, coupled with the particular features of the methodology and process as developed and implemented by the Commission and its staff, has accounted for the rigorousness of the system.

Equity

Extent of Due Process

The Maryland system has a number of procedural safeguards for the hospitals. The Commission is subject to the Administrative Procedures Act, which governs notification of actions and publication of regulations. Hospitals have the right to file rate applications and to have a decision from the Commission within a reasonable period. Most of the Commission's business is conducted in public.[1] A number of diverse, independent groups monitor the Commission's work. Disagreements between a hospital and the Commission are aired in public hearings, in which the hospital has the right to present testimony and to cross-examine witnesses. Because the Commission operates independently of the Department of Health and Mental Hygiene, appeals of Commission decisions go directly to the courts.

One criticism that has been leveled against the Commission is that the Administrative Procedures Act is not followed with respect to promulgation of regulations. Some important aspects of the system, including the inflation adjustment procedure and the GIR system, are extralegal--they are not promulgated as regulations. The Commission staff believes that this is not a significant problem, because the hospital always has the option of filing a rate application, and the hospital is under no obligation to accept an inflation adjustment. Still, there are factors that have contributed to the willingness of most hospitals to operate under this unusual system. One is the promptness of the adjustment; inflation adjustments are made quickly on a regular schedule (usually annually),

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[1]Maryland has a "sunshine" law limiting executive sessions and requiring that business conducted in executive session be summarized at the next public meeting.

whereas a rate application may take five months to resolve. Second, while a public hearing does afford the hospital an opportunity to present its case, it also puts the hospital in the public spotlight. The Commissioners and staff are vigorous and sometimes intimidating in their examinations of witnesses, so a hospital administrator, in deciding whether to file a rate application, must consider whether the possible ordeal is worth the effort.

Ambiguity in Rate Setting

The HSCRC enabling legislation is fairly clear about the objectives of the regulatory system and gives the Commission broad authority to carry out its mandate. The law gives the Commission broad powers to hold public hearings and obtain data "relating to any matter affecting the costs of services" (emphasis added). Additional authority is given the HSCRC to establish a uniform accounting system, to require financial reporting (and to impose penalties for failure to report), to audit hospital records, and to conduct studies. Procedures for conducting the rate-setting process, as well as for rate appeals, are also outlined in the legislation. The charge given to the new Commission, as well as the tools available to it, were thus relatively clear and unambiguous.

The policy of the HSCRC has been to make clear its intentions and to justify its policies either by issuing staff papers or through appearances before hospitals or the public by high-level Commission staff. In terms of formal procedures, however, the Commission has not been scrupulous about documentation of its activities. While its intent may be clear, the specific details underlying procedures used to approve rates are often slow to be written up and disseminated. While the various systems used to set rates are conceptually logical and straightforward, the mechanics tend to be complicated and difficult to follow without comprehensive documentation. Some of the information that has been compiled and disseminated to hospitals regarding the IAS and GIR, for example, was brought together by MHA task forces to help hospitals understand the system.

There has thus been a definite lag between the implementation of a rate-setting methodology and the understanding of that methodology by the industry. The IAS formula is currently well documented, but the mechanics of the GIR adjustment are only now being formally described. Considerable respect for the abilities of the Commission staff now seems to be accorded by the hospitals, and this may help to diffuse their objections to any deficiencies in the formal administrative procedures of the HSCRC.

The Commission has made it clear to hospitals that sound justifications are required for rate applications (outside the IAS). Hospitals that can demonstrate that additional revenues will be used to implement efficiencies, that cash requirements in addition to the CFA will lead to economies of scale, or that approval of a proposed rate will be cost-saving in some way will improve their chances for rate approval, while unsubstantiated

quality arguments or fear for competitive position will tend not to be persuasive. The Commission staff will not hesitate to use the data base it has compiled to do its own analysis of a hospital's claims. Since evidence surrounding rate applications is generally presented during monthly, public meetings of the Commission (and is generally available in writing for distribution at that meeting), hospitals should be familiar with the types of arguments that are more or less persuasive. Currently, at least, there has been almost no turnover among high-level Commission staff, so that the policies and predispositions of the staff leadership should by now be well known.

Arbitrariness in Rate Setting

For the most part, the application of the IAS is a mechanical process whereby the hospital's revenue and statistical data are fed into a formula that generates a new set of approved rates. The IAS contains few discretionary elements and mostly involves the uniform application of a detailed formula.

More discretion is involved in rate reviews (either full or partial) and in rate setting for new programs. While it is apparent that the Commission staff has a sense of which hospitals are well managed and which are not, analysis of data and justification of decisions are emphasized. Despite the lack of a formal review methodology that is uniformly applied to these types of applications, the system does not seem to be arbitrary in its application.

Without having witnessed any of the analyst-hospital negotiations, it is not possible to assess whether there is differential treatment of applicant hospitals. However, certain safeguards against arbitrariness are built into the system. Blue Cross representatives participate in all phases of the process: they are sent copies of all rate applications, they sit in on negotiating sessions with the hospitals, and they can present testimony at Commission hearings as well as appeal Commission decisions. All rate decisions must be made by the Commission, either as part of its regular monthly meeting or following a public hearing; the decisions thus follow the presentation in a public forum of evidence supporting the decisions. If the staff recommendations are not upheld, the Commissioners' own reasons will be presented during the course of the meeting. Court appeals, as a last resort, can guard against arbitrary decision making on the part of the Commission.

Minor changes are frequently made in the rate-setting system, some of which are made to correct what the Commission has perceived to be faulty methodology. When such changes are made, no retroactive adjustments are made for hospitals whose rates may have been affected by the mistaken methods. Any hospital questioning this approach will be told that a mistake had been made and was corrected, but that its situation will not

be reassessed. Although this policy would appear to be inequitable, apparently no hospital has appealed, indicating that it has not been widespread or abused.

Uncertainty in Rate Setting

There are some significant areas of uncertainty for hospitals under the Maryland system. First, hospitals may be summoned at any time for a review. The strategy of the Commission is not to harass hospitals on small points but to develop significant areas of concern and then review a hospital to illustrate a point. There are no written criteria for selecting these hospitals.

Second, important aspects of the system have gone undocumented for long periods of time. While the principles of inflation adjustment and GIR were explained to the hospitals, the first actual adjustments were done by hand without documentation. During the times when changes were being implemented, Commission staff had a natural advantage in that they were the only ones who understood the system, but the situation has improved somewhat over time. The inflation adjustment system was documented by an MHA task force that included Commission staff. The GIR system, however, has not yet been fully documented. Some hospitals have studied the inflation adjustment system and can predict fairly accurately the adjustment they will get; other hospitals still do not have a feeling for how the system works. The Maryland Hospital Association has run workshops to educate hospitals about the mechanics of the system. To the extent that the hospitals do not understand the system, one can question whether they really respond to the incentives built into it.

Third, there were no written criteria for selecting hospitals to participate in the GIR system. Initial implementation of GIR occurred in a variety of hospitals, some of which were put on GIR because of high average length of stay and others as part of an experiment with a representative sample. Hospitals objecting to the GIR were given the same choice as with the inflation adjustment: accept the system or file a rate application. The Maryland Hospital Association believes that GIR was implemented too quickly and that hospitals have had to deal with considerable uncertainty. Because GIR is still not fully documented, hospitals cannot predict with accuracy how much their GIR adjustment will be. In practice, there have been few complaints about the uncertainties generated by GIR, probably because hospitals have been better off under GIR than under the old system.

In contrast, there are some aspects of the system that have decreased uncertainty for the hospitals. The Commission takes seriously its mandate to concern itself with the financial stability of Maryland hospitals, and the hospital system as a whole is running a substantial surplus. Once the hospitals understand the rate-setting system, planning is easier; hospital managers can allocate their resources within the constraints set by the Commission.

Equity in Interhospital Comparisons

Interhospital comparisons were initially an important part of the rate-setting system, but they are becoming less important as time goes on. During the first round of rate reviews, Commission staff were required to challenge costs above the 80th percentile for similar hospitals. Two types of groupings were used: urban versus rural and teaching versus nonteaching. This was the only time that formal grouping was used.

Interhospital comparisons are sometimes used in connection with partial or full rate reviews. When application for a rate for a new service is made, the staff will usually note the ranking of the proposed rate (e.g., fifth highest in the state). There is no formal grouping; any grouping is done on an informal, ad hoc basis. Comparisons are made to illustrate a particular point (e.g., Hospital A's intensity of service is much higher than intensity in hospitals of similar size with similar case mix).

The fact that any comparisons made are informal may lead to fears that these comparisons are arbitrary. This is tempered somewhat by the fact that hospitals have the right--and are sometimes encouraged--to refute the staff's analysis with comparisons of their own.

Equity in the Trend Factor

It has been mentioned that no projected indices are used in the Maryland system; current trends are assumed to continue through the next rate year. A slight departure from this pattern occurred recently when President Carter's seven percent inflation guideline was used instead of the current actual rate, which was closer to eight percent.

No studies have been done to assess how the inflation rates used by the Commission to set hospital charges compare to the actual rates experienced by hospitals. The Commission, however, believes that inflation in both payroll and nonpayroll costs should bear some relationship to market inflation rates. To date, no hospital has demonstrated a marked discrepancy between its own inflation and the provision allowed by the HSCRC.

While the availability of the city-specific indices allows the Commission to apply different inflation rates to Baltimore and suburban Washington hospitals, no appropriately localized indices are available for the rest of the state's hospitals. Use of the U.S. average index for those hospitals may or may not accurately measure their factor cost inflation. Since the U.S. average is based on data from urban areas, the allowance may be too generous for some costs and too stringent for others. The HSCRC is currently working to refine the index for rural areas.

Any deviation between the actual inflation rate and that provided in rates will be allowed hospitals in their next inflation adjustment through retroactive price adjustments and price leveling. If the variance between the two rates of increase is substantial, the hospital may experience short-run cash flow problems or surpluses. However, variances have tended not to be large, and in the event large discrepancies occur, hospitals may apply for another inflation adjustment before the end of the year.

Equity in Volume/Intensity Adjustments

The HSCRC has tried to structure its various systems in such a way that hospitals receive adequate compensation for reasonable costs incurred, but that they are not rewarded for changing their behavior in ways believed to be detrimental. Specifically, formula-based adjustments have been incorporated to adjust hospitals' rates to compensate them for the variable costs of volume increases.

The Commission believes the variable cost proportions it has specified to be fairly tight; that is, hospitals probably do not profit from volume increases. Whether they recover their costs is unknown. However, in response to some evidence produced by hospitals about the cost impact of large volume changes, more generous variable cost proportions were allowed for large increases in volume.

Units of service for patient care centers consist whenever possible of relative value units to measure the actual resource use involved in producing services. No matter what the source of the volume changes (e.g., case-mix changes, quality changes), their cost impact is assumed to be the same and the volume variance formulas are applied uniformly. For GIR hospitals, incentives to reduce volumes are more clearcut, and since the system is based on individual base-year resource use, the hospitals know how to alter their utilization patterns in order to benefit under the system. The Commission believes the costs of implementing the GIR in non-GIR hospitals would outweigh the benefits, however, and further expansion is not currently planned.

Extent of Cross-Subsidization

Before the full participation of Medicare and Medicaid, the Commission set rates to ensure that total revenue (the sum of revenue from participating payors and revenue from non-participating payors) would be adequate for the hospital's needs. Blue Cross feared that the built-in cross-subsidization would further weaken its position, since Blue Cross had negotiated substantial discounts for its patients before the Commission set rates.

As of July 1, 1977, Medicare and Medicaid began participating in the system as part of a three-year experiment. With their participation,

all payors--public and private--pay Commission-determined rates. A six-percent discount has been granted to Blue Cross, Medicare, and Medicaid. The figure of six percent was arbitrary, and a study is under way to determine what the appropriate payor differential is.

Summary

The Commission attempts to set rates that allow hospitals to finance the reasonable costs of providing care to patients. While the methods used to set rates rely primarily on exogenous price indices, flat variable cost proportions, and other formulas and indices, hospitals presenting sufficient justification can negotiate exemptions from the standard methodology. Generally, however, the role of negotiation in the system has been considerably reduced and hospitals, on balance, are treated uniformly. All payors are also treated uniformly, since all pay HSCRC-approved rates.

While some elements of arbitrariness and uncertainty do exist for hospitals, their rights are guarded by the Hospital Association, Blue Cross, and ultimately the court system, as well as by the very open and public nature of the process. The consensus among the participants on both sides seems to be that the system is fair and reasonable. For most of them, the system as it has evolved is a source of considerable pride.

APPENDIX A

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Review Commission

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